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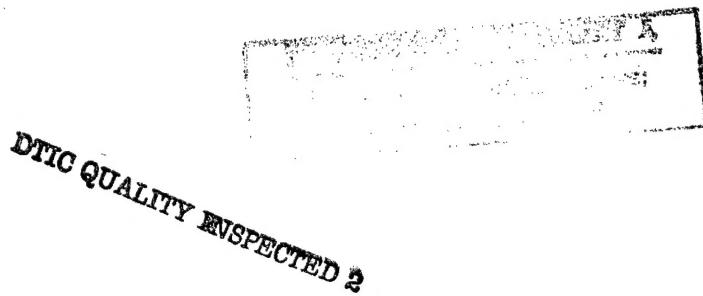
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# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS



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14 May 1984

EAST EUROPE REPORT  
ECONOMIC AND INDUSTRIAL AFFAIRS

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INTERNATIONAL AFFAIRS

EVOLUTION OF POLISH, HUNGARIAN ECONOMIC REFORMS CONTRASTED

Warsaw POLITYKA in Polish No 12, 24 Mar 84 pp 1, 6, 7

[Article by Mieczyslaw Nasilowski: "The Pole and the Hungarian--Two Methods";  
passages enclosed in slantlines printed in boldface in the original source]

[Text] /The Hungarian economic reform has been in force for 15 years already, while the Polish one has been in force for only 2 years. In the Hungarian reform one could see a visible regression in the years 1972-1979 and only the new phase, initiated in 1980, indicates that the political leadership has become convinced that the continuation of the reform is a condition of further socioeconomic progress./

The Hungarian reform was introduced and has continued under a rather favorable market balance in consumer goods and services. The Polish reform, on the other hand, was introduced in probably the deepest imbalance of the whole postwar period, not only with regard to the market, but in general; in circumstances exceptionally unsuitable for a favorable functioning of economic-financial mechanisms. As a result, in its basic foundations (that is, regarding the establishing of prices, foreign exchange rates, income taxes for enterprises, the mechanisms of supplying funds, and the socialization of the decision making mechanism), rather essential modifications of the original assumptions have taken place on behalf of the so-called "systemic temporary provisions."

The reforms in Hungary and in Poland have been carried out in conditions of large debts, with the Hungarian debt being even larger per capita (about 750 dollars) than the Polish debt (about 730 dollars). More reliable, however, is the index of the ratio of the costs of servicing the debt (that is, the interest due and the principal) to the value of realized exports. In Hungary, it amounts to about 0.50, and in Poland, to 1.8. In both cases this index exceeds the acceptable limit of debt assumed as safe. The Polish reform, however, started under the condition of an enormous debt, while the Hungarian debt 15 years ago was not a problem.

In the past 3 years there has taken place in Poland a drastic decline in the real income of the population, estimated at about 30 percent. In Hungary, on the other hand, it has been possible to maintain income at a steady level, and only the mean real wage has declined slightly, about 3-5 percent. For this reason /in Poland the methods of restoring market balance by further raising prices/ meet with social disapproval. Or this increase is quickly compensated for by a forced increase of wages. /The possibility for restoring the market balance rests, therefore, in increasing the production, enriching its range and raising its quality./ In Hungary, on the other hand, one of the main goals of economic policy is to maintain and improve market balance with rather rigorous limitations on the growth of nominal wages and price increases. To this task are subordinated the adopted system-type solutions.

#### Fewer Ministries

In the sphere of institutional changes, the Hungarian method is more advanced than the Polish one. The reasons for it, in my opinion, are a longer period of implementation and the negative experiences of the first years of its operation, when the changed economic-financial mechanisms were not accompanied by the necessary changes at the central level. Old institutional structures were unable to adjust to the new conditions and the new style of work and gradually they transformed the reform at the level of enterprises "to their own image and likeness." /Not until 1981 were all branch ministries eliminated and in their place one Ministry of Industry was created (employing about 650 employees, / that is, fewer than there had been in the former Ministry of Machine Industry). In Poland, on the other hand, it was only possible to limit the number of branch ministries in industry from 10 to 5.

/In Hungary the Planning Commission was reformed considerably, eliminating all the branch departments/ which were the equivalent of the branch structure of the eliminated ministries. The Planning Office, employing about 300 highly qualified specialists together with administrative-technical personnel, and the National Planning Committee, were separated from the Planning Commission.

On the basis of the structure of superior goals set by the country's political leadership, detailed pre-planning studies, and an analysis of the income balances and material balances, /the Planning Office prepares various plan projects, which are evaluated by the National Planning Committee in a preliminary fashion./ The Planning Committee, besides the chairman and several deputy chairmen, includes representatives of all economic departments, banks, the Central Bureau of Statistics, and trade unions. /This Committee has no decision making rights with relation to other economic organizations regarding the allocation of funds and tasks. It cooperates closely with the Government Economic Committee, whose main duty is the current, operative management of the economy, / and the control of the course of the realization of the plan. The Economic Committee makes a detailed analysis and evaluation of the

country's economic situation every quarter and passes on to economic organizations the program of further action, pointing out anticipated moves in the spheres of price, credit, and fiscal policies, and the like, as well as the current limits in raw materials and energy. This information is used to correct and update the autonomous plans of economic organizations.

It ought to be stressed that Hungarians are increasingly developing the demand orientation of central planning, in which profit balances and the demand thus created, established from the point of view of maintaining and consolidating the market balance, are of prevailing importance, as opposed to our material balances. In Poland, on the other hand, the tradition of material balances continues to dominate and the ties with profit balances are relatively weak. In our Planning Commission there are still no cells analyzing the financial activity of the state. Neither are there simulated financial accounts being made in the economic sphere of the instrumentalization of the plan.

The organizational structure of the Polish Planning Commission still conforms to the structure of branch departments, which cooperate with appropriate departments of the Planning Commission and through them exert pressure for the allocation of funds, with their particular ambitions and interests in mind.

/In Poland there appear several decision making centers with weak internal coordination and strong motivations driven by ambition,/ susceptible to various private schemes. This constitutes an essential obstacle in forming a competent strategic leadership, capable of elaborating plans of economic development and harmonizing profit-demand aspects of the plan with supply-material aspects.

/The liquidation of branch ministries in Hungary has generally been considered a great success of the reform. It should be remembered, however, that at the Industry Ministry, 10 branch Supervisory Commissions were created in 1982,/ which require yearly reports from the directors of enterprises, exert influence on the enterprise's production profile, mainly from the point of view of export needs, approve the employee bonus system, assign the director's salary, evaluate his activity (with the possibility of making a motion for his recall), evaluate enterprise's loan applications to the bank, etc. /These are far reaching interventions in the activity of enterprises,/ which limit their independence. Therefore one can say that although the organizational form of the central level has changed rather considerably and although direct orders have been eliminated, /there are nevertheless remnants of the elements of the distribution of deficit raw materials, particularly in the supply imports, and rather broadly developed forms of control from the central level./

As estimated by one of the leading economic activists in Hungary, the official work time of the departments is filled by directing subordinate enterprises similar to the traditional one, while long-term development programs of the departments and other conceptual activities are carried out by teams of experts and management of the departments outside the normal work schedule.

In sum, however, the structure and the range of competence of central organs in Hungary are undoubtedly better adapted to the demands of the system reform than in Poland.

#### How to Earn? How to Spend?

Let us now discuss the specifics of the principles of /creating enterprise funds and income taxation. /

In Poland as in Hungary, similar funds are created with similar, sometimes identical purposes, but they are generally based on different principles. The most important one is the employee wage fund and the fund for enterprise development. Both funds, together with the tax system, are to coordinate the current consumer needs of employees with the development needs of the enterprise and with the country's socioeconomic development.

In both countries the principle of shaping independently the employee wage fund, with sharp progressive taxation of the growth of the wage fund in Poland, and the growth of the mean wage in Hungary over the amount free of tax, is in force.

/In Hungary the employee wage fund/ is set by the enterprise management from the point of view of the tax free increase of the mean wage with regard to the previous year. The increase of the mean wage resulting from 30 percent savings of the wage fund by merit of a decline in employment is tax free provided that the savings do not impair the production results. The rate of profitability reached by the enterprise, calculated as the ratio of achieved profit to net fixed and turnover assets and wage funds, also allows for a tax free growth of the mean wage. The obtained profitability rate is multiplied by the uniform factor 0.12 and in this way the allowed percent of the increase of tax free wage is obtained. Also free of tax are payments from the participation in profits fund, provided they do not amount to more than 2 percent of the mean wage in the enterprise. Certain reliefs are applied to enterprises which have a relatively low profitability, objective difficulties in raising it, and lack the possibilities or economic justification for limiting their number of employees. Of considerable incentive significance is a relief amounting to 50 forints from each 1000 forints in export increases, provided that the final rate obtained in the export is lower than the exchange rate of 45 forints to the dollar.

Each increase of the mean wage over the mentioned limit is multiplied by 3, in order to increase the effect of the progressive tax increasing from 100 to 500 percent.

Tying relief from taxes on the growth of the mean wage to a decrease in the number of people employed and the profitability of production seems a better solution than the reliefs for the FAZ [Vocational Activation Fund]

in virtue of half of the growth rate of production sold in Poland. The Hungarian solution encourages the improvement of some efficiency ratios, while the Polish one promotes production growth at all cost, even at the cost of quality, and also promotes various assortment manipulations. The relief for the growth of production finds certain justification in the mining industry, but not in the processing industry, particularly in areas in which production growth is limited by the supply of raw and other materials, components, and spare parts, which factors are independent to a considerable degree from the work quality of the enterprise.

#### The Hand of the Revenues

In sum, the principles of taxing the increase in wages are rather complex in both countries, and because of a low threshold and strong increasing progression, their effect is counterproductive. It is a temporary solution stemming from the fear that excessive growth of wages will take place at the cost of the development needs of the enterprise and further deterioration of the market situation. In the future, with the improvement of the market situation, the system of taxing the increase of the mean wage ought to be replaced by universal progressive taxes of individual employee incomes, without, however, destroying the incentives for improving qualifications and for more efficient work.

/Income tax is the tool regulating the amount of profit to be divided./ Following various unsuccessful experiments with the scope of progression, the principle of linear tax has won an almost general recognition. In Hungary the income tax amounts to 45 percent, and in Poland, to 60 percent. The higher rate of taxing profits in Poland probably results from the large budget deficit and a deep imbalance in the sphere of the means of production. For this reason the central authorities strive for limiting both consumer expenses and the investment costs of an enterprise. In Poland, because of uneven conditions under which enterprises get started, wild price fluctuations and a progressive scale of income tax in the years 1982-1983, a so-called sum tax was temporarily introduced for the years 1984-1986, whose main function was to soften for some enterprises the passage from the progressive to the linear tax.

The turnover tax in both countries is of price-forming character. In connection with greater price stability in Hungary, the turnover tax is also very stable, and its scale seems to be less diversified than in Poland. In Hungary the turnover tax is paid for wholesale, that is, the retail trade pays wholesale price together with the turnover tax. In Poland the switching of the turnover tax from the production phase to trade has only begun.

In Poland there additionally is tax on the whole wage fund of the enterprise, at the uniform rate of 20 percent yearly, and also tax on real estate on behalf of the territorial budget. Both these taxes are calculated into the proper costs of production, which is a phenomenon rather unique in the world. They unnecessarily increase production costs and decrease profitability of

exports, thus their effect is anti-export. In Hungary this category of tax does not exist. Neither is there tax on real estate calculated into proper production costs. Hungarian enterprises, on the other hand, are charged permanent communal dues for the development of municipal infrastructure in the amount of 15 percent of their profits before taxes.

In sum, the tax system in Hungary seems better constructed than in Poland, which results not only from longer experience, but also from a better system of prices and a balanced domestic market.

#### How to Set Prices?

The system of prices in Poland consists of official prices, regulated prices and contract prices. The function of official prices is protective, guaranteeing a consumption minimum at prices usually subsidized by the state budget. Contract prices in their assumption were to prices of balance, set according to the demand formula. In the face of the deep market imbalance and increasing social resistance to an excessive growth of these prices, a trend to narrow the range of contract prices and expand the range of regulated prices, according to the so called cost formula, is apparent. This formula is convenient for enterprises because it gives them wide possibilities for manipulation, enabling them to transfer various effects of mismanagement to the consumer. Efforts to divide costs into justified and unjustified are only in their preliminary stage. The question arises whether they will not create a certain need for bureaucratic control and whether the results of such control will be effective.

While in the sphere of consumption a protective price policy for staples and common use goods is temporarily justified, /the policy of low and sometimes simply deficit prices of investment and supply goods raises serious doubts. It results in low profitability of various endeavours to save coal, energy and rare raw and other materials, and leads to a lack of incentives for modernization of investments./ High material-intensiveness and energy-intensiveness of production in Poland additionally increases the demand for development investments, increases balance tensions in the national economy and by the same token delays processes of rationalization and overcoming the crisis.

The price policy also does not promote exports. About 40 percent of the exports are counted in official prices and not in transaction prices. Transaction prices themselves are converted into zlotys at the foreign exchange rate, which does not always mobilize to export. The main pro-export incentive in Poland is foreign exchange allowances to the enterprise's account (the so-called ROD). Regulation of these allowances and tying them to the import-intensiveness of the export production rather than to its effectiveness together with some limitations in the full use of these funds all rather effectively weaken their action.

/In Hungary a greater degree of rationalization of prices results not only from the balanced market but also from tying prices of production means and a considerable part of industrial goods to the world market prices.

Prices for raw and supply materials/ are established on the basis of the mean price paid in the imports of the hard currency countries, multiplied by the foreign exchange rate in force (45 forints to a dollar).

/Prices of processed industrial goods/ included in exports are established on the basis of their average transaction prices converted into forints at the above-mentioned foreign exchange rate. The principle is that the average growth of prices of goods sold within the country should not exceed the average growth of foreign exchange goods in the export of these goods. The purpose of this is to limit the interest of enterprises in sales on the less demanding domestic market at the cost of the exports.

/Retail contract prices/ as a rule are prices of balance. In recent years there has been a trend to narrow the scope of official prices subsidized by the state and expand the scope of contract prices. /The abandonment of the cost method and switching to the regulation of domestic prices in relation to prices paid for imports or obtained in exports, and establishing contract prices according to the supply-demand formula, constitutes undisputed progress in the price policy in Hungary./

#### Not Enough for Exports

/The rate of foreign exchange in both countries does not fulfill the basic function of balancing the trade balance/ (to say nothing of the balance of payments). In both countries the rate is established on the basis of the average cost of purchasing a foreign exchange unit in the exports and not on the basis of the marginal cost, defined by the export which is relatively the less profitable, although necessary for balancing the import. The adopted principle of establishing the foreign exchange rate results not from the desire to create a strong pro-export incentive, but from the fear of a domestic inflationary growth of prices. Thus a limited pro-export incentive induces the state to promote the growth of export production by other methods.

/Despite an enormous pressure for exports, their growth is too slow in relation to needs./ This is caused not only by import limitations imposed by Western countries, /but above all by a limited supply, a low quality of export production, and a greater facility and higher profitability of sales on the domestic market. It applies in a greater degree to Polish than Hungarian exports./ In both countries there is a pressure for a positive trade balance, obtained by limiting the necessary supply imports and the imports of modern equipment needed to modernize the aging production apparatus, among other things. This is one of the important reasons for the limited possibilities of growth. In Poland it actually creates a realistic danger of economic stagnation in the nearest future. It can also constitute an important danger to the system reform, because the pressure to increase exports and

the necessary import limitations will strengthen and rebuild under various forms the administrative methods of limiting the distribution of funds and creation of various preferences, according to subjective criteria.

#### What Can Be Learned From the Comparisons?

The directions of further development of the Hungarian reform for the near term are expressed in the striving to strengthen competitive structures, expanding freedom in setting prices and wages, standardizing and making universal the progressive income tax on the population's individual incomes, and creating broader possibilities for the transfer of capital to various branches by means of obligations. There is striving for the universality of the competitive method of post assignments, an increase in territorial independence, introduction of self-governing forms of small enterprises, introduction of the principle of electing directors of medium-size enterprises by supervisory councils (consisting in 1/3 of representatives of the work force, in 1/3 of representatives of higher institutions, and in 1/3 of the directorships of the enterprises). The goal of these and many other projects is a more efficient realization of the current assumptions of the reform and further limitation of the possibilities of imposing ineffective central decisions on independent enterprises.

Despite an undisputedly better quality of economic instruments in the Hungarian reform as compared to the Polish reform, in both there are subjectively individualized methods of management, and various tax reliefs, waivers, compensatory payments, budget subsidies and credits supporting weaker, less effective producers, which "soften" the rigors of self-financing and restore the old production hierarchy, not infrequently at the cost of production quality and increased use of raw and other materials.

Excessive criticism with regard to contract prices, a lack of social approval of the bankruptcy of inefficient enterprises, fear of unemployment, and above all, the inert attachment to traditional forms of subsidizing by the center allow many weak enterprises to exist independently of the results they obtain. In these conditions the traditional pressure for quantitative production growth is easily restored, instead of mobilizing the incentives and economic pressure to increase the efficiency of management.

In the sphere of the distribution of investments, the old system in a new form, that is, selective loans or even subsidies to enterprises at the discretion of the central authorities, in fact continue to function. In Poland, for example, continued investments are given obvious preferential treatment over new investments by enterprises. This limits the possibilities of carrying out necessary structural changes and leads to the decapitalization of assets in many important areas of production. /Thus in both countries a mechanism for allocating funds from the point of view of their most effective application has not been created./ Neither is working the mechanism

for economic enforcement in the sphere of lowering material costs per production unit, rationalization of employment, increase in productivity, raising the production quality, and so on. The fact that the situation in this respect is better in Hungary than in Poland results mainly from achieving a market balance, a relatively smaller burden on the balance of payments on the side of the costs of servicing the debt, and a considerably smaller "investment overhang."

#### Differently, But Not Always Better

Despite the liquidation in both countries of the commanding methods of planning and management, bureaucratic steering has not been eliminated, although it is being done by more refined and undoubtedly more effective methods. Open and veiled instructions have not disappeared from the practice of managing the national economy, and the profit or income of the enterprises has not become the main index of the enterprise's success and the measure of the efficiency of its activity. The introduced reform in its basic assumptions is in both countries the result of a compromise between the rules of so-called "hard financing," and the conviction that economic processes ought to be managed by a properly developed state and political apparatus according to criteria and goals which it considers valid. For this reason in place of the previous formalized means of control included in the system of command writing of the plan, new ones, often informal channels of intervention in the activity of independent and self-financing enterprises, are created, unsuitable for the criteria of effectiveness verified by the market mechanism.

Thus instead of making the decision making procedures more democratic and striving for a full integration of the central plan based on the criteria of effective supply, with market mechanisms regulating the microprocesses in enterprises, a manipulated set of economic-financial instruments is being created, to be used for the purpose of maintaining the old in content, though modified in form, socioeconomic system. Here, I believe, lies the main cause of the "softening" of the new economic mechanisms introduced by the reform and at the same time the basic cause of the weak progress in the sphere of the effectiveness of management. Enterprises are operating differently, although not always and not necessarily better.

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CZECHOSLOVAKIA

BUDGET, FINANCIAL POLICY FOR 1984 DISCUSSED BY MINISTRY OFFICIAL

Prague FINANCE A UVER in Czech No 1, 1984 pp 1-8

[Article by Eng Julius Jombik, ScC, first deputy minister of finances of the CSSR: "The State Budgets and Financial Policy for 1984"]

[Text] At the end of 1983 the Federal Assembly discussed and approved the law on the state budget of the CSSR Federation for 1984 in prices applicable as of 1 January 1984.

The tasks stipulated in the state budgets and financial plans for 1984 may resume the positive trends achieved in our national economic development during the first half of the Seventh 5-Year Plan. The results in the fulfillment of the tasks of the Seventh 5-Year Plan thus far have been thoroughly evaluated in the conclusions of the Presidium of the CPCZ Central Committee and the CSSR Government on the fulfillment of the plan for the first half of 1983 and in the discussion of the Ninth Plenum of the CPCZ Central Committee on 23 and 24 November 1983; they reveal the positive phenomena in the intensification of our economic development, particularly a better assessment of material inputs during that period. Our national economy is gradually adapting to the restricted inputs of fuels, raw and other materials, which makes it possible, beginning in 1983, to focus on accelerating the dynamism of our economic development. However, to achieve the objectives of the Seventh 5-Year Plan, the dynamism of our national economic development must be accelerated in the remaining 2 years more than the projected results for 1983. Every positive tendency in the development of efficiency must be intensified, the persisting shortcomings must be consistently remedied and, on that basis, the quality of the living standard attained by our population and its social welfare must be strengthened and improved.

Economic Prerequisites Affecting the State Budget for 1984

The development of the national economy in the CSSR in 1983 was characterized by revitalized dynamism in the creation of material resources in main branches of our economy, along with the growth of selected qualitative indicators of efficiency and enforcement of good stewardship in the management.

Gradual implementation of the Set of Measures in practice was reflected in total results as well as in the results of individual organizations. A higher

standard of material incentives promoting conservation of materials costs, application of the system of limits and norms together with restricted imports helped exert pressure in favor of conservation of materials and energy. Excessive cooperation was curtailed, losses caused by goods of inferior quality declined, and the finality of production increased. The coefficient of flexibility was up, the circulation of inventories improved, the rate of unfinished projects under construction dropped, costs cut and profitability improved.

The effort to enforce efficiency and economy was comprehensively reflected in the development of the expenditures of the state economic organizations, which had projected that savings of total costs would be higher than planned, particularly the material costs (without depreciation) and services of the nonmaterial type, and on that basis it also was expected that the adjusted plan of profits would be overfulfilled.

In spite of the more distinctive positive trends in the development of our economy and in the fulfillment of the state plan, certain long-lasting problems persisted even in 1983. Conspicuous deviations from the plan occurred in some vital sectors of our economy. In particular, the imbalance between the structure of production and national economic needs continued; investments increased above the plan and investment capital was diffused among a great many construction projects. Especially the exports of the machine engineering industry to nonsocialist countries developed below expectation; the long-term deterioration of efficiency in foreign trade expressed by declining exchanges both with the socialist and the nonsocialist countries continued. The tasks for 1983 planning better utilization of the inventories in industry and construction (the turnover rate accelerated by 3.1 days) have not been fulfilled in 1983 (acceleration in 9 months by 1.1 day).

Last year's economic development was evident from the generally auspicious fulfillment of the state budget. In comparison with the planned tasks, the payments made by state economic organizations to the state budget were especially well fulfilled. On the other hand, the sales tax reflected a slow dynamism and underfulfilled the plan during the year. In conjunction with the declining efficiency of foreign exchange, conspicuous nonfulfillment of the planned tasks in the area of financial economic policies in foreign trade had been anticipated. This adverse development, however, was compensated for by the growth of other incomes derived from the economic sphere, higher payments by the financial branch and savings of costs.

#### Focus of Financial and Fiscal Policies in 1984

The financial and fiscal policy in 1984 will again follow the main task of implementing the strategic line of the socioeconomic development in the CSSR as outlined by the 16th CPCZ Congress and specified by the subsequent session of the CPCZ Central Committee. A decisive direction involved especially higher efficiency, consolidation of economic management, better quality of work, enforcement of a steady, comprehensive turn toward intensified economic development, better balance of foreign economic relations by means of higher efficiency, greater export capacity of our economy, consolidation of our financial balance, and the achievement of a balanced state budget.

The state budgets and financial plans for 1984 will accomplish these tasks if additional financial resources are created at a faster rate than planned and projected for the development in 1983 mainly on the basis of the assumption that the expenditures, particularly the material costs, will be relatively speedily cut.

In conjunction with the Set of Measures and other policies for improving the planned economic management system, the financial and budgetary policy for 1984 includes the following steps:

- the processes of redistribution, especially in the sector of investment financing, are further restricted in the state budget and financial plan, and kholzrashchet principles are strengthened;
- in the sector of financing inventories, the measures introduced in 1982 for the planned development of inventories are further intensified;
- the system of invoicing and payments of deliveries for investment is newly modified by Decree No 37/1983 of the SBIRKA and at the same time its efficiency and effect are safeguarded by measures in the areas of planning, recordkeeping and assessment of the fulfillment of the plan, in control of wages payable, in rewards to managerial personnel, in financing of working capital and in credits;
- in conjunction with the practical testing of the measures introduced for the purpose of improving the efficiency of foreign economic relations, as approved by Decision No 1/1983 of the CSSR Government, all organizations of the Federal Ministry of General Engineering began on 1 January 1984 to test the correlation of profits from domestic operations with the profitability of foreign trade;
- since the beginning of this year research and development financing has been improved as one of the measures within the system of tasks stemming from the Eighth Plenum of the CPCZ Central Committee and from Decision No 1/1983 of the CSSR Government;
- grants will be made from the state budget starting in 1984 when applying two sets of prices in support of selected advanced goods, especially microelectronic elements, industrial robots and manipulators, appliances and equipment conserving fuels and energy and using nontraditional sources of energy;
- the space in the Ministry of Engineering and the Ministry of Industry of the CSR and the SSR has been expanded for the application of legal authority and accountability of the management of the VHJ's [economic production units] by raising the ceiling of the maximum balance of the contingency capital of the VHJ's and, similarly, the resources of the funds for research and development in those ministries are transferrable semiannually because the ceiling for the maximum balance of such reserves has been raised.

More emphasis must be placed on consistent application and intensification of the tasks of the program for good economy in the management in the Seventh 5-Year Plan, approved by Decision No 346/1981 of the CSSR Government. The fulfillment of the tasks of that program is being observed and assessed on a continuous basis and additional measures for its intensification and expansion are being adopted.

Savings derived from the tasks fulfilled in the program of good economy of management are included in the state budget for 1984; accordingly, the managing personnel of central agencies and directly managed administrative organizations will be cut by 779 employees, of which 589 employees will be terminated in systemized organizations of the central agencies, and the sector of national committees will be reduced by 882 administrative employees. Economic measures applied in the sector of other investments are reflected in the plan proposed for 1984 which will cut expenditures by Kcs 2.2 billion as compared with the 1982 plan. The system of limits will cut additional selected nonproductive costs; the development of operational costs of organizations is controlled. Attention is newly focused on conservation measures in the sector of enterprise social consumption, the development of costs stemming from shortfalls and damages, penalties for losses caused by products of inferior quality, etc.

#### Main Proportions of the Fiscal System

In order to ensure a systematic development of financial relations, appropriate prerequisites are set this year by stipulating the tasks in the creation of resources and by adapting them for general as well as individual purposes to realistic opportunities so that, when balancing the total of financial resources and needs, they will also be balanced in individual sectors of the financial and fiscal system. A vigorous effort to resolve the problems of financial development is evident primarily from the emphasis on the growth of efficiency and consolidation of good management as the basic methods guaranteeing a more dynamic growth of financial resources and balanced financial relations.

In accordance with the law on the Seventh 5-Year Plan, the resources and needs of the entire fiscal system and its individual factors are balanced in the state budgets and in the budgets of national committees for 1984. The budgets approved for 1984 envisage an increase of incomes and expenditures of the fiscal system by a total of Kcs 6.28 billion, i.e., 2 percent.

Table 1 presents a survey of state budgets and of the budgets of national committees.

ukazatel (1)	ČSSR (2)		federace (3)		CSR <sup>a</sup> (4)		SSR <sup>a</sup> (5)	
	[bil. Kčs]	index 1984/83	[bil. Kčs]	index 1984/83	[bil. Kčs]	index 1984/83	[bil. Kčs]	index 1984/83
příjmy státních rozpočtů a rozpočtů NV celkem (3)	324,26	102,0	186,82	101,4	174,38	101,6	91,85	102,1
v tom: (9)								
— vlastní příjmy státních rozpočtů (bez dotací a subvencí) (10)	285,56	101,8	186,82	101,4	72,36	102,0	26,38	103,5
— příjmy rozpočtů národních výborů (bez dotací a subvencí) (11)	38,70	103,8	—	—	27,30	105,2	11,40	100,5
— dotace z federálního rozpočtu (12)	—	—	—	—	74,72	99,8	54,07	101,6
výdaje státních rozpočtů a rozpočtů NV celkem (13)	324,26	102,0	58,03	103,0	174,38	101,6	91,85	102,1
v tom: (9)								
— vlastní výdaje státních rozpočtů (14)	213,67	102,1	58,03	103,0	97,62	101,5	58,02	102,3
— dotace do státních rozpočtů republik (15)	—	—	128,79	100,6	—	—	—	—
— výdaje rozpočtů národních výborů (16)	10,59	101,9	—	—	76,76	101,9	33,83	101,9
— dotace a subvence do rozpočtů NV (17)	(71,89)	100,7	—	—	(49,46)	99,9	(22,43)	101,6

<sup>a</sup> včetně rozpočtů NV (18)

Key:

1. Indicator
2. CSSR
3. Federation
4. CSR
5. SSR
6. [bil. Kčs]
7. Index 1984/1983
8. Total income of state budgets and budgets of national committees
9. Of which
10. Internal incomes of state budgets (without grants and subsidies)
11. Incomes of the budgets of national committees (without grants and subsidies)
12. Grants from the federal budget
13. Total expenditures of state budgets and budgets of national committees
14. Internal expenditures of state budgets
15. Grants to state budgets of the republics
16. Expenditures of the budgets of national committees
17. Grants and subsidies to the budgets of national committees
18. Including budgets of national committees

While the incomes of the state budget of the Czechoslovak Federation share 65.4 percent in total incomes of state budgets, they share only 20.3 percent in their total expenditures. The remaining assets of the state budget of the Czechoslovak Federation are derived in the form of designated and general grants to the state budgets of the republics to cover their planned needs, including part of the needs of the budgets of national committees.

The internal income base of the state budgets of the republics as well as of the budgets of national committees has a slightly reduced task; due to price adjustments in 1984, the share of grants from the budget of the Federation to cover the expenditures of the state budgets of the republics will amount to 56.6 percent, as compared with 53.1 percent in 1983.

Taxes of economic organizations represent the largest volume in the income of state budgets and budgets of national committees in the CSSR (43.8 percent), of which taxes from the economic results of state economic organizations [SHO] amount to 26.7 percent of the total budget incomes; the sales tax and the differentials of domestic market amount to 27.8 percent, and the taxes collected from the population and duties amount to 13.9 percent of those incomes. In the expenditures, noninvestment costs for social services and programs for the public have the largest share (47.0 percent), of which 25.1 percent is paid for social security; then follow other noninvestment costs of the sphere (17.4 percent) and grants for investment and noninvestment subsidies to economic organizations (16.0 percent).

Investment grants to economic organizations have been drastically reduced as compared with 1983; the total volume of noninvestment grants to those organizations and the noninvestment expenditures in the budgetary sphere are slightly higher. This made it possible to increase the noninvestment expenditures of the budgetary organizations and the contribution to the contributory organizations in conjunction with the tasks stemming from the state plan. The implementation of the principle of maximum economy in this area means that, for example, these expenditures within the noninvestment costs of social services and public programs have been increased over 1983 only in the case of wages payable of the budgetary organizations, social security contributions, services in the educational and health systems, expenditures for pharmaceutics and special medical materials (7 percent increase in both republics), contribution for cooperative housing construction, expenditures for major overhauls, repairs and maintenance of highways.

When planning the outlays for the development of public consumption, the applied principle calls for the fulfillment of the stipulated tasks without increasing the financial requirements and with achieving a better quality of outputs. For that reason it is imperative to invest the budgeted funds solely for vital and urgent societywide needs. Other undertakings and programs that do not meet the requirement of efficiency and that are expandable from the viewpoint of public benefit must be cancelled or fundamentally cut.

The Creation and Use of Financial Assets in Economic Organizations

The contribution of economic organizations to our society (the balance of their financial resources and needs) will be increased by Kcs 7.4 billion, i.e., 10.5 percent, of which Kcs 4.4 billion is designated to raise the accumulation of resources and Kcs 3.0 billion to reduce the requirements. The point of gravity in improving this relation has shifted to the area of accumulation of financial resources, which is a change in comparison with the first years of the Seventh 5-Year Plan, when the above-mentioned balance stemmed primarily from curtailing the requirements of economic organizations. The contribution of economic organizations to the state budget (the balance of taxes and grants) where those organizations bring the main part of their contribution to society will be increased by Kcs 7.1 billion, i.e., 9.2 percent, and its amount will be Kcs 92.7 billion (without sales tax and differentials of domestic market). This balance in our domestic economy (after the effect of financial economic mechanisms in foreign trade has been deducted) will be raised by 12.6 percent, i.e., Kcs 9.9 billion.

The planned accelerated accumulation of financial resources in 1984 is based on the projected growth of financial resources in economic organizations, which stems mainly from the creation of profits in the total amount of Kcs 120.9 billion; this represents a 7.2 percent raise over the projected effect of 1983. The reduced share of total costs will increase the profits from our domestic economy by 71.3 percent and the growth of outputs by 28.7 percent. The objectives planned in the sector of profits, outputs and costs are reflected in the 5.4 percent increase of profitability on total costs, a 3.4 percent rise in adjusted value added and a 3.1 percent increase of production assets.

These exacting tasks are based mainly on greater efficiency in the sector of material costs where the share of total costs in outputs will be reduced by 0.59 percent and the material and other costs, not including depreciation, by 0.63 percent. The rate at which the share of wages and other personal costs will be reduced (-0.96 percent) is based primarily on the planned advance in the growth of labor productivity before the rise of the average wage. The high rate of the semiannual cuts planned in the summary item entitled "Financial Costs" (-2.43 percent) is affected above all by the elimination of the penalty-type financial costs from the plan. Unlike these positive tendencies, the share of depreciation of capital assets in the outputs has been increased (+2.40 percent) due to the rapid growth of investments over the past years as well as to the underutilization of the existing capital assets.

Basic proportions for the distribution of financial resources between the economic sphere and the budgetary system in the plan for 1984 are affected by the implementation of the financial policy promoting the growth of the role played by internal resources in the khozrashchet sphere and restricting the antagonistic movements of financial assets. If the resources for distribution mark an overall increase of 5.9 percent, the funds left to organizations will be up 12.7 percent and the taxes to the budgetary system up 3.9 percent. By the same token, centralization and redistribution of the assets by supervisory agencies are also desirably limited specifically

to the most urgent cases. The higher amount of assets left to the economic sector from its profits decreases the overall taxes paid to the state budget and at the same time reduces the need for grants from the state budget to capital investment.

These objectives of our financial policy are reflected in the structure of funds for financing the investments of economic organizations where, in accordance with the stipulations of the Set of Measures, the importance of internal financial assets of the VHJ's and organizations has been enhanced and their share in the financing of investment needs raised from 60.7 percent to 69.9 percent. In order to achieve a realistic structure for the financing of investments and to decrease credit encumberances, the share of investment credits is cut from 23.1 percent to 22.2 percent. In comparison with the past year, grants for investments from the state budget are cut by Kcs 5.0 billion and their share in the financing of the investments of economic organizations is 0.3 percent. These contributions are granted only for the most relevant selected programs in the development of our fuel and energy base and, furthermore, for investments related to our defense potential, agricultural development and other urgent demands.

The depreciation tax paid to the state budget is connected with the consolidation of the khrashchet role of profits in the financing of investments by economic organizations and with the balance of total planned resources and needs for capital investment; it is restricted to the most urgent needs, in order to eliminate above all the antagonistic movements of grants for investments from the state budget and the payment of depreciation to the state budget, as it appeared from the conclusion of an analysis of problems newly developing between the dynamism in profitmaking, depreciation and real credit resources on the one hand and investment needs of individual branches on the other; the CSSR Government commissioned this analysis when debating the proposed state budget for 1983.

In the stipulation of the planned tasks for the sector of inventories, the crucial point of departure was the fulfillment of the turnover of inventories in industry and construction on the level envisaged in the projected budget for 1984, i.e., acceleration by 2.0 days. The exacting character of the tasks in this sector is also emphasized by the adopted principle that if the planned objectives are not fulfilled in 1983, this will be fully reflected in more rigorous stipulations of tasks for 1984.

#### Financial Policy and the Living Standard

The measures of financial and fiscal policies affecting the living standard of our population contain the following objectives and programs for 1984;

-- noninvestment expenditures for social services and public programs in 1984 will be Kcs 152.5 billion, i.e., 3.2 percent (Kcs 4.7 billion) more than in 1983; on the average they will amount to Kcs 9.874 per citizen, i.e., Kcs 431 more than in 1983;

-- noninvestment outlays for social security within social services and programs for our public amount to Kcs 83.6 billion, i.e., 3.1 percent more than in 1983, for the educational system Kcs 24.6 billion, or 2.9 percent more than in 1983, and for the health system Kcs 23.3 billion, i.e., 3.6 percent more than in 1983; expenditures for culture amount to Kcs 4.0 billion, i.e., 0.1 percent more;

-- expenditures from state budgets for housing construction and housing economy will amount to Kcs 27.7 billion, which is 1.6 percent more than in 1983;

-- deliveries of goods to consumer goods inventory will amount to Kcs 291.9 billion and will be up Kcs 5.8 billion (index 102.0), while the average tax encumbrance will be 19.7 percent of the retail price, i.e., less than in 1983; sales tax, including the differential of the domestic market, will be Kcs 90.0 billion, i.e., Kcs 2.2 billion more than in 1983, and negative sales tax will amount to Kcs 21.4 billion;

-- noninvestment grants from the budget directly affecting the living standard of our population will reach a total of Kcs 14.4 billion; they subsidize mainly the price of slaughter cattle and poultry, the costs of heating, compensation for the losses of housing economy, and compensation for the losses of municipal mass transportation;

-- a 0.5 percent increase of average wage (not including the JZD's [unified agricultural cooperatives]) in 1984 is under consideration. Cash incomes of our population will be up Kcs 6.5 billion, thus amounting to Kcs 400.7 billion (1.6 percent increase) in 1984; incomes derived from wages will be up 1.1 percent and incomes from social security up 2.9 percent;

-- savings and cash of the population will increase by Kcs 15.9 billion; by the end of 1984 deposits will amount to Kcs 205.3 billion and the amount of cash on hand to Kcs 49.3 billion;

-- new grants of loans to the population will amount to Kcs 11.3 billion (not including interest) and total loans will amount to Kcs 37.9 billion (including interest).

Expenditures for social security which will increase by 3.1 percent, i.e., Kcs 2.49 billion, over 1983 remain the main factor in the increase of total noninvestment outlays of fiscal and contributory organizations paid for social services and programs for the population. New tasks of societywide significance, such as expenditures connected with the preparations for Czechoslovak Spartakiada [mass gymnastic exhibition] and with our participation in the Olympic Games, are also included in the expenditures of the budget.

Funds which the state designates for the social security of our population are continuously rising due to several factors, particularly the number of

citizens in corresponding age groups, the birth rate, the number of minor children, work disability caused by illness or injury, the standard of wages and legal policies adopted in this area.

The growth of the expenditures is determined in particular by the expenditures for pension benefits; the proposal for 1984 calls for a 3.6 percent increase. It is projected that 3,930,000 pensions will be paid in 1983 and 1.32 percent growth, i.e., 3,982,000 pensions, is anticipated for 1984. The number of pensioners and pensions is expanding gradually and steadily due to the age structure of our population and an increasing number of workers filing pension claims. In 1984 there will be 3,425,000 pensioners, i.e., 22 percent of the CSSR population. The growth of outlays for pensions (which will reach Kcs 51.0 billion in 1984) is also affected by the increase in wages which are higher in the case of the newly granted pensions than in the terminating pensions. For instance, the average old age pension of employees was Kcs 1,283 in 1983, while in 1984 it is Kcs 1,304; however, the average amount of pensions newly granted in 1983 was Kcs 1,543 against Kcs 1,571 in 1984.

Contributions from the state budget for the purpose of promoting the population growth are projected in general at the amount of Kcs 17.85 billion and are Kcs 0.38 billion higher. The steepest increase, namely Kcs 0.30 billion as compared with 1983 -- to Kcs 14.45 billion -- is designated for children's benefits. The number of recipients of allowances for children will increase from 2,092,000 in 1983 to 2,100,000 in 1984; the allowances are also increased because they will be paid for more second and third children in the family. Other contributions promoting the population growth, with the exception of maternity benefits, are stagnating or slightly declining because fewer births are expected in 1984.

The noninvestment outlays for the health care system in 1984 include an increase of wages payable in conjunction with the state plan, better health care service reflected in the growth of outputs, and a noticeable rise in materials expenditures due to higher costs of drugs and special medical materials. In agreement with the objectives of the state policy for this sector, based on the decisions of the 16th CPCZ Congress, more funds will be expended above all to strengthen the frontline of contacts with our citizens, for statewide health care programs and for tasks related to better care for mother and child. In comparison with the past year, the per capita noninvestment expenditures in our health system will be up 4.1 percent; the absolute amount of these costs per capita will be Kcs 1,509 in 1984.

#### Conclusion

In terms of accumulation and use of financial resources and incomes and expenditures of the fiscal system, the planned tasks may be fulfilled only by an energetic approach to the solution of problems in financial development, with an emphasis on higher efficiency and on the application of the most economic methods possible as the primary means to achieve a more dynamic growth of financial resources and balanced financial and fiscal relations. The stipulation of tasks that will considerably stimulate certain

sectors, mainly in the area of profits, sales tax, financial economic mechanisms in foreign trade and accelerated turnover of inventories, calls for their consistent fulfillment in the budgets and financial plans of all national economic sectors, especially for their implementation in the fulfillment of the tasks; this requires, among other things, specific, more efficient managing programs of the personnel on all levels of management as well as conscientious endeavor on the part of every citizen.

In order to achieve the above-mentioned objectives, the authority of the planned tasks, based on absolutely realistic foundations, must be consistently enforced, and counterplanning with related initiative of whole work teams and effective material incentives encouraging interest in disclosing untapped assets in our national economy must be properly implemented.

9004

CSO: 2400/295

GERMAN DEMOCRATIC REPUBLIC

INCREASED POWERS FOR WORKERS' AND PEASANTS' INSPECTORATE

West Berlin TAGESSPIEGEL in German 16 Mar 84 p 3

[Article by M. Mara: "An Army of Inspectors Prunes the GDR Economy"]

[Text] By the end of March elections will have been held for 250,000 new "people's inspectors" in the GDR. They work in 18,700 factory commissions and 6400 residential area commissions within the Workers' and Peasants' Inspectorate (ABI). This inspectorate is of course no independent control organ. It is directly controlled by the party and the government.

Its most important objective is to see that the resolutions and directives of the party and the government are realized in the combines, plants, cooperatives and service institutions. It also performs a control function within "national and economic bodies" and takes an "active role" in plan fulfillment.

It is also the responsibility of the ABI to wage an energetic battle against all violations of "socialist law" and national discipline, waste and abuse of "public-owned property", bureaucracy and maltreatment of the citizens of the GDR. It also follows up on suggestions, criticisms and other such input of which there is no lack.

The control arm of the inspectorate is rigidly organized and is governed by a central committee whose chairman is also a member of the Council of Ministers. Bezirk, kreis, city and city district committees are subordinate to this committee. They organize all inspections in their respective areas in accordance with a plan devised by the Secretariat of the SED Central Committee and the Council of Ministers.

These committees are aided in their efforts by the more than a quarter of a million honorary assistants in the factories and residential areas who will be elected during the next two weeks. The party also has the last word in the elections--the "people's inspectors" are usually persons suggested by the SED leadership and are always subject to party approval. Only "progressive and exemplary" workers have a chance of being elected. The people's representative bodies, political parties and social organizations, as well as the bodies for national defense, security, justice and foreign affairs, are not subject to these inspections.

In other areas the inspectorate has relatively wide-ranging powers. It can demand verbal or written information or statements, view documents or other papers, request written materials and impose performance requirements in the case of non-compliance with regulations. The committee chairmen have the right to suspend measures and directives which are contrary to laws and resolutions and can demand that they be rescinded. They can also levy fines for breach of ordinances.

The ABI excersises a good deal of authority in the factories and residential areas which is reflected in the results of these inspections. Last year alone, a mass inspection for energy saving measures in the Schwerin bezirk brought about a savings of 7.8 million marks in electricity and natural gas. In the Dresden bezirk the ABI accounted for a reduction of seven percent in the consumption of electricity. This year the ABI will also conduct numerous inspections in support of the official economic policies.

Because the ABI is an invaluable instrument for the GDR leadership in their constant struggle against economic losses, sloppiness, routine, bureaucracy and incompetence, its scope is to be expanded. In numerous factories and residential areas such inspection committees are now being formed for the first time. Some existing groups are also experiencing increases in personnel.

12552  
CSO: 2300/406

GERMAN DEMOCRATIC REPUBLIC

ECONOMICS CONFERENCE STRESSES INTERDISCIPLINARY, TECHNICAL STUDIES

East Berlin NEUES DEUTSCHLAND in German 14-15 Apr 84 p 10

[Article by Isolde Bergemann: "Demands of the 1990s Conferred Upon--Rectors' Conference on the Training of Future Economists"]

[Text] The first multilateral conference of rectors of economic universities and advanced schools in socialist countries, which was held at the beginning of April at the "Bruno Leuschner" Advanced School for Economics, dealt with the demands of the 1990s regarding communist training and education. Attending the conference were rectors, prorectors, deans and members of the ministries for advanced schools from Bulgaria, Czechoslovakia, the GDR, Yugoslavia, Cuba, Poland, Romania, the USSR, Hungary and Vietnam. They were warmly greeted by Dr Gerhard Engel, deputy minister for advanced and technical schools of the GDR. In his opening address he informed the guests about some basic concepts concerning future developments in training and advanced education for engineers and economists in the GDR.

The keynote address on the conference theme was presented by the rector of the Advanced School for Economics in Berlin, Dr Rolf Sieber. He emphasized that the solid and reliable foundation for personality development in students and for scientific work in all disciplines is the Marxist-Leninist world view of the working class. Therefore, post-secondary study must be a productive process from beginning to end and must demand of students a high degree of personal responsibility.

The rector reported that his advanced school's responsibilities regarding the training of leadership cadres had increased dramatically with the formation of combines in the GDR. Therefore, about three years ago his school introduced an intensive direct study program in leadership. This program is followed up by two- to three-year assistantships under the general directors of large combines, as well as with five months of post-graduate study. This program has shown that today only interdisciplinary methods are effective in teaching the basics of leadership. This requires greater cooperation between economists on the one hand and sociologists, psychologists and pedagogues on the other. Greater emphasis is also placed on increased knowledge in the fields of information processing, microelectronics, biotechnology and robotics, as well as of the makeup of

management, planning and stimulation of the socialist reproduction process. Particular emphasis is also placed on the necessity of continuing advanced education for economists in theory and in practice.

The recommendations of the multilateral rectors' conference for more intense cooperation between the economic universities and advanced schools of the socialist countries stated that economic training in the 1990s must conform to and be consistent with the structure of a developed socialist society.

Greatly increased concentration and centralization, as well as the inter-relatedness of social production on both a national and international level, make necessary a knowledge of the functioning of an entire socialist economy and a greater historical and international understanding of the dialectics of social developments in the context of the world-wide revolutionary process.

The conferees also agreed to increase informational exchanges regarding the practical effectiveness of Marxist-Leninist economic theories, particularly between advanced school instructors, but also at student conferences and international student competitions.

12552  
CSO: 2300/412

BALANCE-OF-PAYMENTS BREAKDOWN FOR 1983 IN DOLLARS, RUBLES

Warsaw POLITYKA in Polish No 12, 24 Mar 84 supplement POLITYKA-EKSPORT-IMPORT  
p 17

[Article by Andrzej Dorosz, undersecretary of state, Ministry of Finance,  
and Mieczyslaw Pulawski: "Poland's 1983-1984 Balance of Payments in Rubles  
and Dollars"]

[Text] How big are Poland's debts today? How have our payments been to the socialist and capitalist countries? What are the possibilities of using credits? What shall we expect in the near future? As was done last year, we are publishing an exacting analysis of our balance of payments. Because some calculations are still being made, the presented data are preliminary estimates.

In calculations using transfer rubles (RT), Poland's exports of goods and construction to the socialist countries in 1983 were 7.5 billion RT, while payments for imports were 8.4 billion RT. In the following year, as a result of trade payments in convertible currencies, there was a negative balance with the socialist countries. The deficit was almost 0.9 billion RT. This means that there was an increase in the trade payments deficit as compared to 1982, when the deficit was about 0.7 billion RT. As in previous years, most of the deficit was in trade with the Soviet Union. Last year, however, the negative trade balance existed with almost every socialist country. Poland's negative trade balance with the socialist countries has been partially financed by a surplus in service payments. It was almost 0.3 billion RT in 1983. The remainder of the negative trade balance was financed by new credits. As a result of these new and old credits, interest payments stood at 114 billion RT. After payment of some other obligations, Poland's deficit was around 0.7 billion RT with regard to turnover with the socialist countries.

Financing the Deficit

As was done last year, the deficit in current turnover was financed by the same method, i.e., short-term credits from the International Bank of Economic Cooperation and then long-term credits from the Soviet Union to finance the negative balance with that country. The considerable deficit in current turnover has not caused a significant increase in Poland's indebtedness to

the socialist countries and the CEMA banks, because she has utilized ruble means gathered from previous years. In effect, Poland's debt to the socialist countries increased only from 3.7 billion RT at the end of 1982 to 3.8 billion RT at the end of 1983.

Achievement of turnover payments in convertible currencies with the socialist countries did not differ significantly from the original plan. Export earnings and import payments were at a level slightly higher than planned, because the increase in payments was comparatively larger than the increase in earnings. Earnings were about 6.7 percent higher than the original plan, while payments were about 7 percent higher. This only confirms the tendency in the last few years of increasing trade turnover with the socialist countries in order to improve the national economy. According to the statistics from the Main Statistical Office [GUS], the share of countries from the first payments area (socialist) increased from 53.2 percent in 1982 to 53.6 percent in 1983; in export from 48.8 percent to 49.4 percent and in import from 57.9 percent to 58.2 percent. This underscores the increased significance of the socialist countries, and especially the Soviet Union, as a source of supply of imported goods. For example, 80 percent of our national supply of fuel and energy was imported from the Soviet Union. In addition, Poland's import turnover with the socialist countries shows about 56 percent of the metallurgy needs, 30 percent of the chemical industry's needs, 32 percent of the needs of light industry and about 20 percent of the food product and agricultural needs. The socialist countries are now the main supplier to our economy of electro-machinery products. In 1983, we bought almost 72 percent of these products from the socialist countries. In contrast to the situation existing in 1982, imports of machinery and tools from the socialist countries increased in 1983 by 14 percent. In most cases, these were machinery and equipment needed to modernize industry and to raise the level of efficiency in agriculture. The dynamic increase in purchases indicates the tendency toward new investments in Polish industry and the adaptability of our socialist partners to Poland's actual needs. Sometimes the modernization of entire branches is possible because the socialist countries deliver the required machinery and equipment -- especially in the textile and printing industries. The increased imports of products from the electromachine industry and the continued high level of exports of these products confirm the broadening level of cooperation between Poland and the other socialist countries.

#### Export, Import and Credits

The realization of payment turnover in convertible currencies with the capitalist countries was close to the plan in some cases and far from it in others. Earnings from the export of goods and construction were somewhat smaller than anticipated in the plan. On the other hand, import earnings varied considerably from the plan.

It was planned that export earnings would equal in 1983 5.6 billion American dollars (USD), but only 5.4 billion were achieved, or 96.4 percent of the goal. When compared with the planned and realized sizes in zlotys, one can see an achievement of 98.7 percent of the goal. Therefore, calculation in dollars reduces the achievement of the plan by over 2 points. This is a consequence of the several-percentage-point increase in the value of the

dollar in relation to other capitalist currencies, which has taken place during the past year. Because over 50 percent of the export earnings are in currencies other than the American dollar, the value of total export earnings is reduced upon calculation into USD.

In contrast, import payments were at a level of 4.3 billion USD, lower than anticipated in the plan by around 0.6 billion USD. This means that in 1983 payments in dollars achieved 88.1 percent. On the other hand, achievement of the plan in zlotys was considerably higher because of the above-mentioned appreciation of the dollar. Thus achievement of the plan is closer to 90 percent.

The second year of trade turnover with countries from the second payments area (capitalist) showed a surplus, achieving around 1.1 billion USD. This was around 0.7 billion USD more than in 1982 and around 0.4 billion USD more than anticipated in the plan. This surplus also included turnover from services and money transfers. It achieved a value of over 0.4 billion USD. In effect, last year noted for the first time a surplus -- 62 million USD -- in current turnover in convertible currencies with the capitalist countries.

In 1983, Poland obtained 565 million USD in new medium- and long-term credits (the plan called for 800 million USD). The largest share, over 200 million USD, was Libyan credit for the purchase of crude oil. The remainder included smaller credits to finance needed deliveries for investment, ordered in earlier years from some Western countries.

Thanks to the cited payments surplus and the new credits, last year we paid almost 1.6 billion USD in interest and around 0.3 billion USD in capital debts from medium- and long-term credits. Moreover, around 0.3 billion USD were paid for short-term credits. Therefore, total payments tied to regulated debt obligations were around 2.2 billion USD, of which payments for services with medium- and long-term credits met anticipated quotas in the plan, while an unanticipated position occurred -- lowering of the level of short-term indebtedness.

#### What About Indebtedness?

As seen from the information given above, the reduction in the quota for import payments in relation to the plan was caused by the following factors: the necessity to regulate short-term indebtedness (around 0.3 billion USD), nonutilization of planned quotas for medium- and long-term credits (less by over 0.2 billion USD) and nonrealization of the planned level of export earnings (around 0.2 billion USD).

A new element, which appeared in the balance of payments with the capitalist countries, is the so-called revolving credit. It is worth remembering that the last two agreements on refinancing credit obligations from so-called nonguaranteed credits obtained from Western commercial banks required that after payment of interest by the Polish side, the banks would grant to Bank Handlowy certain short-term credit quotas proportional to the amount of repaid interest.

The Vienna agreement, which was signed on 3 November 1982, included a provision for disposition to Bank Handlowy of a quota comprising 50 percent of the repaid interest in the form of 6-month transactional credits for a period of 3 years. On the other hand, the Luxembourg agreement, which was signed on 3 November 1983, increased the credit limit to 65 percent of the repaid interest and extended the credit period to 5 years.

In 1983, revolving credits in the sum of almost 0.9 billion USD were utilized and simultaneously a quota of over 0.5 billion USD was paid, or a net use of over 0.3 billion USD in credits. Last year, around 20 percent of the import payments were financed with revolving credits, which caused a certain irregularity in the import payments.

The bottom line with respect to the balance of payments with countries from the second payments area and Poland's indebtedness for 1983 is a difficult one. This balance does not include the interest to be earned by Western creditors from guaranteed loans. The discussions on refinancing these obligations were halted by the Western countries in January 1982 and since that time Poland has stopped servicing her responsibilities for the debt. At present, it is difficult to delineate the size of the interest payments. This may be possible only after renegotiation of payments with Western creditors. This will take place during discussions on restructuring guaranteed loans. According to initial evaluations, at the end of 1983 Poland's interest obligations that were either not paid or formally discarded were estimated at around 2.7 billion USD. Without consideration of this position, Poland's indebtedness in convertible currencies to the capitalist countries (calculated in American dollars) fell during the course of the last year from 24.8 billion USD to 23.7 billion USD. However, it is necessary to remember that the decline in indebtedness calculated in American dollars was a consequence of the increased value of the American currency in relation to other countries.

In conclusion, it would be worthwhile to devote some comments to the plan for Poland's payments turnover in 1984. A particular analysis of the plan is not necessary as it has been ratified by the Sejm and published in the press. Above all, it is necessary to state that this year's plan does not contain any radical changes in Poland's payments situation. In relations with the capitalist countries there is an increase in trade turnover, but because there is a certain increase in the weight of indebtedness one cannot count on material improvement in the economy from imports from the capitalist countries. This year there will be an increase in indebtedness on the same scale as last year, although only a portion will be in interest payments to Western creditor countries. The multiplying indebtedness of the national economy in relation to the necessity to work out a larger surplus in the trade balance with the countries from the second payments area will be neutralized, as was the case last year, by the growing scope of trade exchange with the socialist countries and the payments deficit with the Soviet Union. This means, however, a further increase in Poland's indebtedness in transfer rubles. In the future, when these debts have to be repaid, this will cause an additional burden on the national economy.

9807  
CSO: 2600/842

POLAND

AIRCRAFT SALES TO HARD-CURRENCY MARKETS

Warsaw RZECZPOSPOLITA in Polish 27 Mar 84 pp 1, 2

[Article: "Aircraft Industry Earns Hard Currency: Dromaders in Greece, Melex Continue Making Their Way to U.S.A., Will Pipe Production Be Renewed?"]

[Text] (From our own sources) Our aircraft industry's cooperation with the socialist countries is well known, especially that with the USSR, to which we export substantial numbers of the popular AN-2 biplanes, the Antek, and we take part in the production of the IL-86 airbus. On the other hand, less is said about free-market exports, despite the fact that they are of no small importance either.

At one time the United States was a major customer for products of the Polish aircraft industry among the capitalist countries. During the 1970's the American market made up a full 95 percent of exports to payments area II. After the cancellation of the most-favored-nation clause, duty there increased seven times (from 5 percent to 35 percent of value), and it was necessary to seek new markets. Last year the situation was saved by the sale of 30 Dromaders to Greece, but competition on Western markets is very keen, and it will be difficult to fill the gap created by the drop in the export of aircraft to the United States.

We continue to export the popular WSK Melex produced in Mielec to the American market. They are used there as golf carts. It is true that the duty in this case too increased substantially, but the antidumping duty put at one time on the Mielec carts no longer applies. In order to keep the Melexs on the market, the producer had to forfeit raising transaction prices, despite the rise in costs, and even so the level of deliveries declined from 10,000 carts to 2,500 per year.

On the other hand, there is still uncertainty over the future of the PT-34A produced at Mielec on license from the Piper Aircraft Company, an American firm. Its production requires a rather substantial (about 30 percent) deposit of foreign-exchange currency, but there are parties anxious to cover the deposit. For example, the Hungarians and Czechs have registered interest. The problem is that to set up production a catalog of at least ten aircraft orders per year is required. Therefore, it is necessary to exa-

mine the situation on the various markets, because there seem to be great possibilities in Peru, for example. Unfortunately, the producers complain that the foreign-trade export enterprise, Pezetel, is not taking an active enough stance.

In this connection the question arises as to whether it would not be better to grant direct producers, especially WSK Mielec, the concession to participate directly in foreign trade. At one time a recommendation to that effect was even made, but then it was withdrawn, because the concession would not include turnovers with countries in payments area I, where most of the turnover is to be found. Basically the Ministry of Foreign Trade refuses to grant such concessions, owing to the need to enter into international agreements with CEMA countries, but it seems that in the case of certain producers, including enterprises of the aircraft industry, it would be possible to depart from this principle, because in this case the role of the foreign trade enterprises is a rather formal one, and the producers maintain direct contacts with the customers and coproducers in the CEMA countries.

In the country's present balance-of-payments situation, any possibility to increase hard-currency exports has tremendous significance. For this reason it would be worthwhile to consider what sort of organizational solutions are the most effective in the exportation of products of the aircraft industry.

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ROMANIA

PLANS FOR MECHANIZATION, AUTOMATION, ROBOTIZATION

Bucharest REVISTA ECONOMICA in Romanian No 10, 9 Mar 84 pp 13, 14

[Article by Barbu Gh. Petrescu]

[Text] As Nicolae Ceausescu has often pointed out in his speeches, and as has been indicated in the party and state decisions initiated and formulated under the direct guidance of the secretary general of the party, labor productivity and its sustained growth are decisive factors for the country's socioeconomic development, for greater efficiency and qualitative improvement in all activities, and for narrowing the gap that still separates our country from economically developed nations. In fact, higher productivity, beginning at each work station and focusing the action of many factors--technical, economic, ergonomic, psychological, and so on--can be defined as the motive force of the economy.

From this perspective, starting with the overwhelming significance of higher productivity for the progress of our industry and economy, we have published several articles in past issues of our journal to voice some considerations about the content and computation methodology of labor productivity, commenting as well on the action of ergonomic and psychological factors. In this article, we will concern ourselves primarily with the general and specific effects on the Romanian industry and economy, of complex labor mechanization, automation, and robotization, as defining elements of higher productivity at the present stage. The well-known extensive efforts made by our party and state to endow the Romanian industry and economy with high technology, are reflected for instance in a 4.5-fold growth in fixed assets in the economy between 1965 and 1982--especially in modern, high performance machinery, tooling, and installations. This framework exploits the efficiency of complex mechanization--much of which has been completed--automation, and robotization, as modern and comprehensive processes for higher productivity.

Compared Efficiency of Mechanization and Automation

Let us begin with a few retrospective considerations. In general and as a trend in the world economy, the possibilities for introducing mechanization were initially understood and applied in a narrow field; emphasis was almost

exclusively placed on production as such, while complete mechanization began to be symbolized by the industrial robot, a mechanism designed to replace the productive worker. Later, as production itself became more complex, and as it was clearly shown to be the most important phase--but nevertheless a phase--of the production process as a whole, it was also demonstrated that mechanization must not be viewed only in terms of fabricating or assembling a product--for which manpower amounts to only 10-25 percent of the production cost--but rather in terms of all the activities in the production process as a whole, from product design to manufacturing, sales, service, as well as production programming and management.

Another aspect is that the mechanization process is of an evolutionary nature, in the sense that the machines (processing ones in particular) have been equipped with programming and monitoring devices, such that it becomes possible to provide them only with an approximate sketch and dimensions of the parts to be fabricated, which are then displayed on a screen, and have the parts machined accurately with constant control during operations. But it is equally true that the trend to excessive mechanization in the form of giant universal machines has proven less competitive compared to a system of machines complemented with mechanized feed and transportation operations at the production site; it was demonstrated that the effective processing time of a giant machine is only a portion of its utilization time--which obviously reduces the efficiency effect of mechanization, while the use of a mechanized system of smaller machines, where the proportion of processing time amounts to 50-90 percent, multiplies the efficiency effects by several fold. We might also note that the use of a giant machine which operates according to a program sometimes raises the risk of introducing errors which can compromise an entire batch of parts, whereas the possibility of error is lower in a mechanized system since each machine in the system has its own program. All these trends were considered in the vast, complex mechanization of our industry and economy, thus raising the efficiency of the mechanization process, with effects manifested overall in terms of a generally economical production.

Let us now refer to another aspect, that of automation, an area for which the National Program for Higher Productivity stipulates major tasks for the Romanian industry and economy, both until the end of the current five-year plan and for the next one--tasks which we have analyzed on other occasions. Let us however examine the technical and economic effects anticipated from automation. Any automation process must result not only in a corresponding economy of manpower, but also in higher productivity for automated equipment and installations, whose operation will be improved; in lower specific consumptions of raw and other materials, and of energy, while complying with manufacturing technologies; in improved product quality due to more accurate applications of technologies and fewer rejects; in longer equipment operation and elimination of overloading; in reduced environmental pollution; and so on.

Some specifics in this respect. In such industrialized countries as Japan, the United States, FRG, Sweden, Belgium, Great Britain, and so on, particular attention has been and continues to be devoted to the automation of mass

production through the creation of complex automation systems. During 1980 for instance, there were 38 complex automation systems in Western Europe, 26 in Japan, and 16 in the United States. In the view of specialists, the major direction of development for labor automation in future years will prove to be the creation of automated sections with digital control systems, based on multifunctional machine-tools.

According to the forecasts of the International Technology Institute for Machine Construction, digitally controlled machine-tools will represent 50 percent of the total machine-tool inventory in 1987, and 75 percent in the year 2000. We should note at the same time, that some American and Japanese universities are studying the development of complex automation for small batch production, and formulating projects for the complex automation of large plants, including the automation of parts assembly and control, tool supply, and adaptation of machine-tools to processing condition modifications.

These automation problems are in the forefront of our current industrial and economic plans. In Romania, the fabrication of digital control equipment has developed in conjunction with--and determined by--the technical level achieved by the national electronic and electrical industry which supplies the necessary active and passive electronic components, connectors, standards, position transducers, and so on. As a result of an intense domestic effort of research and design, digital control equipment of the generations I, II, and III was supplied by IPA (Institute for Automation Research and Design) and FEA (Factory for Automation Elements) on a microproduction basis. Similarly, the development of the computer and minicomputer industry has led to the generations IV and V of digital controls for electroerosion and cutting machine-tools. At present, the Design Institute for Technical Automation (IPAT) and the Enterprise for Automation Elements, are finalizing a multiprocessor digital controller for machine-tools. It should be pointed out that in 1981 only part of our country's needs and of published quotas of digital control equipment had been met from domestic production. That is why it is imperative to hasten the adoption of digital control equipment of generations IV and V. Similarly, as experience throughout the world has shown, higher productivity and general efficiency can be achieved by mechanizing and automating the storage of materials and parts. Automation can begin with a simple mechanization of transportation, and can end with completely automated computer management of all storage handling operations.

#### Value of Robotics

Recent research has determined that due to the use of robots, automation has reached a new stage which involves the simultaneous utilization of computers and artificial intelligence programs as part of evolved structures of flexible automation. These new structures will allow the total replacement of manpower as executor in the management of the production process. Particular attention is being devoted to introducing computer technology and computer management systems for technical processes into the national economy. The program mentioned earlier stipulates the rapid introduction of a large variety of process computers in such basic sectors of the economy as power generation,

chemistry, metallurgy, the construction materials industry, machine construction, transportation, the light industry, agriculture, and the food industry. In this respect, projects are currently being defined for the first integrated, hierarchic computer management systems for activities at industrial sites, such as dispatching for the chemical industry or power generation, or systems in which process computers are interconnected with economic management computers. These are complex projects whose application will create extensive benefits.

Returning to the robot problem, which is so often discussed today in view of the progress made by science and technology and the considerably broader possibilities for efficient utilization of this progress. Production mechanization through the use of robots offers a number of advantages, insofar as robots can be used to work under toxic, dangerous, unpleasant, or monotonous conditions. However, the range of operations that can be performed by a robot is considered to be limited; a major difficulty in this sense is that in general, robots are still not adaptable to assemblies or other tasks that require reorientation of parts with respect to initial programs. However, practice has shown that the use of industrial robots has: increased labor productivity by about 25-30 percent in certain specific sequences of technical steps; replaced humans in locations unsuitable for work (toxic environments, dangerous areas, handling heavy loads, and so on), increased manpower availability on the order of 10 percent, as we have already mentioned; improved the quality of parts and products through highly controllable technical processes; and achieved a relatively short recovery period for the investments made to install them.

As a result of the definite advantages presented by the robotization of industrial processes, an exponential growth in robot production has been observed in recent years throughout the world; according to statistics, the total number of operating robots exceeded 79,000 in 1982.\*.) All industrialized nations characterized by a high economic potential produce industrial robots: Japan (11,000 robots in 1982), the United States (8100 robots during the same year), Sweden, FRG, England, and so on. This satisfies both their domestic markets (in 1982, Japan endowed its industry with 43,000 robots), and outside demand (Western Europe in particular). Similarly, within the socialist countries, a large number of new generation robots are manufactured in USSR, GDR, Chechoslovakia, Bulgaria, and Hungary. Throughout the world, the most rapid penetration of industrial robots is found in the automobile, ship building, machine-tool, metal processing, transportation, and other industries.

In keeping with the worldwide trend, the adoption of industrial robots in our country began in 1980, when MICM (Ministry of the Machine Building Industry) undertook the Program to Build a System of Industrial Robots, which involved the following directions of development: a) design and place in production

\*) Actually, statistics give different figures in this respect, depending on the various acceptances of the robot concept.

several types of industrial robots by 1983; b) start the early fabrication of components for industrial robots, such as displacement transducers, direct current electric motors, speed controllers, minicomputers, and so on; c) satisfy certain industrial demands by expanding automation, robotization, and computerization of industrial processes in general.

These objectives generate intense interest in research and design, higher education, and machine construction. At the same time, efforts must be made to assure the horizontal structure of robot manufacturing, thus helping to reduce the gap that separates us from countries that have introduced robotization in their industries. In the same context, attention should also be devoted to the idea--which companies that have robot production experience recommend as advantageous--that in addition to robot manufacturing, users should be provided with indications about changes that must be made in industrial processes so as to ease the implementation of robots, establish interfaces and peripheral installations, instruct operating personnel, and so on.

At the same time, the concentration of robot research, design, and production into a small number of integrated units has been shown to be necessary, and as we have already mentioned, so has been the organization of the robot industry in a horizontal structure, as follows: production of electric motion devices, control systems, transducers, and sensors for robots; design and production of hydraulic components; greater emphasis on minicomputers, transducers, harmonic drives, special bearings, and servo-valves, which are highly complex components.

Considering the worldwide trends according to which the ratio between the number of industrial robots and the number of manipulators is much lower than one, we consider it useful for the production volume of manipulators to exceed by several-fold that of industrial robots. Other worldwide trends show that manipulators with preset motion cycles are proving to be less costly than programmable robots; nevertheless, the production of programmable robots will increase significantly in future years, due to the advantages they offer.

Robotization will be increasingly involved in industrial production, undertaking major tasks which will require intelligence and the ability to make decisions, such as displacement, manipulation, perception, and communication, both between man and machine and from robot to robot. It is an unquestionable fact that while the industrial revolution started with the transfer of man's physical capabilities to machines, the current and future stage of the industrial revolution will generally involve the transfer of human intelligence to the machine.

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## EFFORTS TO INCREASE PRODUCTIVITY OF LAND

Bucharest REVISTA DE STATISTICA in Romanian No 2, Feb 84 pp 14-17

[Article by Dr V. V. Dumitrescu and D. Sandru of the Central Statistical Directorate]

[Text] In Romania during the years of building socialism, the rational use of the stock of land, preservation and raising of soil fertility have become a state problem for the entire nation. In accordance with the Law on the Stock of Land No 59/1974, the land was declared the most important national wealth, its being indispensable for all activities, being the main means of production in agriculture, so that the degree to which it contributes to the rise in national wealth and to the well being of all the people depends on the way in which it is used and managed.

### 1. Importance of Rational Utilization of the Stock of Land

Establishment of the National Council for Unified Management of the Stock of Land, under the Council of State, shows the priority attention enjoyed in Romania by the protection, use, conservation and improvement of the stock of land. Establishment of this central organ, intended to insure the unified management of the land stock, corresponds both to some organizational needs as well as the requirement for competent solution to some particularly complex problems in use of the stock of land, resulting from the particular economic features of the earth as the main means of production in agriculture.

At the end of 1982, the following were the percentages for the main categories of use of Romania's soil: 63 percent, agricultural area (41.5 percent, arable; 12.8 percent, pastures; 5.9 percent, hayfields; 1.3 percent, vineyards and tree nurseries; 1.5 percent, orchards and fruit tree nurseries); 26.7 percent, forests; 3.6 percent, land covered by water and ponds; 6.7 percent, other areas.

The national program for providing sure and stable agricultural production by raising the land's production potential, for better organization and unified usage of agricultural lands and all areas of the country and for carrying out irrigation on around 55-60 percent of arable area and projects for drainage and for combatting soil erosion, adopted by the Grand National Assembly of the SSR in June 1983, regulates in a unified view the entire series of problems which create superior conditions for good management of the stock of land, for protecting agricultural lands against any waste and for rational utilization of them for the purpose of increasing agricultural production.

Our party's secretary general Comrade Nicolae Ceausescu stressed: "The land is the main factor or, better said, the decisive factor for agricultural production. Nothing can be achieved and cultivated if you do not make available the appropriate area of land. For that reason, we must understand that the land is a national wealth for all the people and that the arable agricultural area must be protected, preserved and developed. Decisive measures are needed to increase fertility of the land, to give new areas back to agriculture, to combat soil erosion and to carry out land improvement and irrigation projects."<sup>1</sup>

The measures which the program refers to bring out the increase in agricultural and arable area, in preserving and raising the production potential of the stock of land, with the earth, in the concept of the party and its secretary general Comrade Nicolae Ceausescu, being the most valuable national wealth of our people and the basic factor in obtaining superior agricultural production and, in this way, under continually better conditions, satisfying the need for agricultural food products. The rationale for these provisions proceeds from the objective reality according to which favorable pedoclimatic conditions exist in Romania for agricultural production, with agriculture being the basic branch of the national economy, with its progress playing a decisive role in the development of the entire country.

These guidelines were brilliantly expressed by Comrade Nicolae Ceausescu in the report on the current stage in building socialism, on fulfilling the single national plan for social-economic development, on special programs and measures for successfully fulfilling the five-year plan and the decisions of the 12th party congress presented at the national party conference of 16 December 1982: "In order to carry out the programs for development of agriculture we must use the stock of land as rationally as possible so that each square meter of land is worked appropriately. Everything must be done for the rapid growth in production per hectare for all crops, thus fully satisfying the national economy and creating reserves for export."<sup>2</sup> The guidelines in this area bring out the urgent need for rational management of agricultural and arable lands, for maximum utilization of this unique and inexhaustible source of food for man. As we know, extending cultivated areas represents a naturally limited means of increasing agricultural production.

## 2. The Effects of Utilizing the Stock of Land

At the level of conditions created by the scientific-technical revolution, there is special importance in the intensive utilization of Romania's agricultural potential through raising the degree of mechanization and chemification of production, creating new varieties of seeds and improving the existing ones, creating new breeds of more productive animals, introducing industrial techniques and extending irrigated lands.

As an illustration, we present the average per hectare output for several agricultural products obtained in Romania compared with other countries [See Table 1].

1. Nicolae Ceausescu, "Speech at the Countrywide Conference of Chairmen of People's Councils, 19 February 1983," in "Romania on the Road To Building the Multilaterally Developed Socialist Society," Vol 35, Political Publishers, Bucharest, 1984, p 280.
2. Nicolae Ceausescu, "Report Presented at the National Party Conference," 16 December 1982, Political Publishers, Bucharest, 1982, p 22.

Average Per Hectare Production in 1980  
(in centners)

<u>Country</u>	<u>Wheat</u>	<u>Grain</u>	<u>Potatoes</u>	<u>Sugarbeet</u>
Romania	28.4	33.9	141	234
Bulgaria	39.7	38.5	85	267
Czechoslovakia	45.0	46.9	136	332
France	51.7	52.6	292	483
FGR	48.9	56.5	305z	484
Yugoslavia	33.5	42.0	83	422
Poland	26.0	35.4	113	221
United States	22.5	57.1	292	439
Hungary	47.6	53.2	150	376
USSR	16.0	31.7	96	218

Source: "Statistical Yearbook of the SRR 1982," pp 354-355

Large amounts were allocated to increase per hectare output, to increase agricultural areas and to manage, improve and rationally use the land. Only after the 9th party congress did the efforts made by the state rise to approximately 61 billion lei in the area of land improvements, irrigation projects, drainage, combatting soil erosion and carrying out some projects to protect against flooding and accumulations of water.

Currently around 11 percent of total fixed capital in the national economy are concentrated in the branch of agriculture, with approximately 96 percent of the agricultural fixed capital being placed into operation in the last 18 years. In order to carry out the first stage of the national program with a view to obtaining sure and stable production, it is estimated to invest large amounts of capital needed for supplying equipment, means of transport, machinery and other materials appropriate for a modern, highly productive agriculture. Also, in the last decade alone, around 11 million tons of chemical fertilizer have been incorporated in the soil and the effect will be to substantially increase production and labor productivity.

With a view to fulfilling these goals, the party program provides for tasks with a view to avoiding the withdrawal of certain areas from agricultural circulation through drainage, digs and land improvement, increasing arable areas as well as increasing the land's fertility. These tasks will be carried out by introducing new land into agricultural circulation and improving the structure of the way the stock of land is used.

Categories of Use of Agricultural Areas in 1965, 1975, 1982 and 1985

<u>Categories of Use</u>	<u>1965</u>	<u>1975</u>	<u>1982</u>	<u>1985</u>
Agricultural area:	14,791,000	14,946,000	14,964,000	15,010,000
Arable	9,817,000	9,741,000	9,870,000	10,000,000
Pastures	2,945,000	3,033,000	3,042,000	2,905,000
Hayfields	1,371,000	1,413,000	1,398,000	1,430,000
Vineyards and winegrowing				
nurseries	312,000	329,000	300,000	310,000
Orchards and fruit tree				
nurseries	346,000	430,000	354,000	365,000

Source: "Statistical Yearbook of the SRR 1982," pp 116, 117; SCINTEIA No 12708, 2 July 1983.

Increasing the agricultural areas to 15,010,000 hectares and the arable areas to 10 million hectares by 1985 is forecast to be achieved by the following:

Water improvement projects which are to be carried out within the program for setting up and totally working the Danube Delta, including by taking some lands from this zone for crops;

Continuing projects for flood protection;

Better systematization of locations;

Utilizing some nonagricultural lands;

Taking land from dammed flood plains for crops;

Improving land with excessive moisture and salt;

Placing some pasture areas into arable circulation;

Restricting roads to what is strictly necessary;

Doing away with clusters of brush and shrubs which do not have a role for soil protection;

Building tree and winegrowing plantations in the hilly zones and doing away with those planted in the plains, which will closure their production cycle.

We know that modern, highly efficient agriculture cannot be achieved without a high volume of irrigation. For this purpose, in order to implement the provisions of the party program for setting up all agricultural areas capable of being irrigated, projects will be intensified so that 4 million hectares will be irrigated by 1985 while the action should close on 5.5 million hectares by 1989. It should be stressed that without man's mastering the ground-plant-water relationship it is nearly inconceivable to provide full utilization of agricultural areas and achieve a high level of production under conditions of high efficiency.

Compared with previous years, the program to set up the entire agricultural area that can be irrigated looks like this:

<u>Years</u>	<u>Arrangements for irrigating (hectares)</u>	<u>Rise(%)</u>
1965	330,000	100
1975	1,474,000	447
1982	2,380,000	721
1985	4,000,000	12 times
1989	5,500,000	17 times

Extending the arrangements for irrigation by the end of 1989 is to be achieved on a priority basis in the zones with a marked lack of humidity, seeking to irrigate as large areas as possible by furrowing, which, in particular, will provide for reducing the consumption of energy, materials and the labor force.

Measures to extend irrigation and drainage, to combat soil erosion and prevent and combat water pollution will contribute to large increase in the production potential of the land and, at the same time, to obtaining superior agricultural production.

PROSPECTS FOR DEVELOPMENT OF TOURISM EXAMINED

Bucharest ERA SOCIALISTA in Romanian No 7, 10 Apr 84 pp 40-42

[Article by Vladimir Moraru]

[Text] Guided by the imperatives for complete materialization of the features belonging to socialism and, equally, by the need for full fruition of the advantages of the social system for organization and social leadership, our party has conceived of a strategy for Romania's social-economic development within which the development of tourism is felt to be an important condition for implementing the program to raise the standard of living of all the people and to raise the quality of life and for increasing national income.

Year after year, with the faster and faster progress of the national economy, the state has increased the material and human resources allocated for developing and modernizing the material base of tourism. As a result, in a relatively short period there has taken place a radical change in the nature and conditions of Romanian tourism, with the proof being the value of fixed capital, which rose from around 5 billion lei in 1971 to more than 11 billion in 1983. On this basis, the tourist potential, wonderful and extremely varied, and the favorable climate conditions for tourism during all seasons are being utilized at high levels.

Overcoming that empiric and rudimentary stage, characterized by sporadic and circumstantial activity, Romanian tourism has radically changed its dimensions and has diversified the sphere it encompasses, becoming an important branch of the national economy, which contributes effectively to the improvement of the quality of life and to increasing the national income. Today Romanian tourism has available more than 300,000 places for accommodations, that is, triple what it had in 1965, included in hotels, villages, rest homes, balneary complexes, cabanas, inns, tourist stops which, being distributed sensibly, provide a balance between seaside tourism, mountain tourism, the balneary resorts and various locations and zones of the country.

In accordance with the directives of the 12th party congress, during the current five-year plan the material base of tourism is in a new, higher phase, one of extension and modernization. In this period many places are being created in various forms of accommodations, to which are to be added new supplies for carrying out balneary treatments, new modern means of cable transport (cabins, chairs, lifts) and other equipment for sports and recreation.

Taking the energy crisis into account, the move in tourism also has been to carry out some projects and installations for the utilization of solar energy, geothermal and thermal water sources by the cabanas. Now operating on seaside are installations for using solar energy to produce warm water, which supply a number of hotels with a capacity of more than 4,000 places. Other installations for hotels are to be built by 1985 as well as for tourist stops along the seaside so that the use of solar energy is to be extended in many hotels on the seaside.

The general effort of all the people through which the move is being sought for a new quality is also seen in the area of tourism, where, among other basic goals, is included modernization of the material base, with this being a main condition for broadening the valences of tourism and for substantially increasing this activity with multiple social-economic functions. Together with the building of new hotels, villas, cabanas, inns and stops, the percentage of financial assets for modernizing the material base carried out years before is increasing. Primarily the emphases are being placed on the modernization of rest homes in the traditional resorts which have prestigious domestic and international reputations like Herculane, Sovata, Predeal, Busteni, Slanic-Moldova, Sinaia, with more than 100 million lei annually being spent for this purpose. Important efforts are being made to provide supplies which correspond to the requirements raised by modern domestic and international tourism so that tourists everywhere can enjoy greater comfort, a diversified recreation base--sports fields, discotheques, game rooms, horseback riding, rafting and so forth.

On the other hand, the balanced development of the material base is planned, seeking for this purpose, parallel with development of the hotel capacity, a very big extension in the capacity of the type of tourism based on motels, camping, tourist stops, vacation villages and so forth.

Achieving such a balance is all the more necessary since 70 percent of investments until now have been directed to hotel construction, which has not also permitted corresponding development of this type of tourism, which can raise utilization of tourist potential to a high level.

The dimensions at which tourism developed in the years since 1965, along with the other material and spiritual conditions created in the years of building socialism in Romania, show that the essence of the new order we are building is to provide a better and happier life for all those who work, regardless of nationality. Today, more than half of the country's population is taking part in recreational tourist activities, for rest and treatment, to regain their health, to increase their ability to work and to add to their knowledge of Romania's history. Last year more than 11 million Romanian workers enjoyed services provided by various tourist units compared with 5.9 million in 1965.

International tourism is seeing great proportions, with this activity reflecting in its specific way the correctness and realism of our party's foreign policy of collaboration and cooperation with the socialist countries, the developing countries and all states and its policy of Romania's intensified participation in world cooperation and in the international division of labor. The average 6-7 million tourists coming to Romania each year from the neighboring

countries or from the furthest corners of Europe, Asia, Africa, North and South America have at their disposal good conditions to spend their vacation or for treatment, conditions which continually are improving due to the broadening and modernization of services, diversification of the range of recreation and rise in the personnel's professional competence.

Faced with the demands imposed by practicing a highly competitive tourism, there is an implicit increase in the amount of material efforts and professional creation, with all workers in this area of activity making sustained efforts so that Romanian tourism offers services at the level of world requirements. And the results are satisfying, with foreign tourists being satisfied with the services offered in more and more respects.

The level reached in the development and diversification of all tourist activity represents sure material opportunities capable of propelling Romanian tourism to higher levels of quality, thus increasing its degree of competitiveness and efficiency. What is required is an increase in the spirit of responsibility and strengthening of discipline for each worker in tourism at each organizational level of this activity. The existing material base, the experience accumulated in all areas of tourist activity, the level of professional training reached all can be utilized with maximum efficiency only through a well-founded organization of all activity, through exemplary discipline and a responsible attitude in fulfilling the plan tasks and decisions made by the collective leadership organs.

In order to fulfill the task drawn by our party's leadership to achieve a radical turning point in tourist activity and the transition to a new quality, efforts in particular are being directed in the following directions:

Improvement and diversification of the tourist supply, a task referring not only to better conditions of accommodations, meals, transportation but also to the opportunity to offer as broad as possible a range of tourist programs intended to satisfy all tastes, to provide active rest, to recover the ability to work, to recover health and enrich knowledge;

Providing of the most varied and useful forms of recreation as possible, to correspond to all ages, professions and so forth on the basis of testing the tourists' tastes;

Continually raising the personnel's qualifications and quality of services offered the tourists;

Increasing economic efficiency and obtaining a higher rate of profitability.

The variety of natural conditions in Romania and the more and more modern material base offer tourism a high potential which provides a broad and diverse range of activities. As a result, the activity of Romania's domestic and international tourism is capable of being carried out on the basis of a tourist supply characterized by originality and variety: seaside tourism, balneary tourism which uses natural conditions (mud, mineral waters and geothermal waters), mountain tourism in all seasons, tourism for winter and water sports, travel tourism for visiting ancient and original material cultures, unique

monuments in the world, professional tourism, tourism for various domestic and international scientific demonstrations (congresses, symposiums).

Romania's current potential can satisfy various requests at the level of world tourism all through the year, keeping the uniqueness which singles out the supply and makes it impossible to confuse it with anything else.

In treatment tourism, the balneary potential we have available gives Romanian tourism a priority nature. This priority has its basis primarily in the wealth and therapeutic value of the balneary potential, which concentrates around one-third of Europe's mineral waters in Romania. Second, this is a 2,000-year-old tradition of balneary treatment in our country, with this activity having started even before the Romans' conquest of Dacia and later developed by the Roman conquerors, as is demonstrated by the traces of the Roman baths at Herculane, Gioagiu-Bai and so forth. Finally, the Romanian school of medicine, world-famous for the results obtained in treating various illnesses on the basis of its own procedures and original products. An eloquent proof of the effectiveness of the medical treatment is the year-to-year increase in number of Romanian and foreign tourists coming for treatment. For example, the number of foreign tourists coming for treatment tripled compared with 1975. More and more clear are the concerns for broadening the range of vacations for health through the promotion and application of original Romanian treatments, with special therapeutic value of the original Romanian products such as Gerovital-Aslavital--for preventing aging--at the Flora and Otopeni Hotels in Bucharest, as well as at the resorts of Eforie-North, Neptun, Mangalia, Calimanesti, Felix, Herculane; Boicil--a particularly effective Romanian product in rheumatism treatment--at the resorts of Herculane, Felix and at the clinic in Timisoara; Covalitin--used for kidney stones--in Bucharest at the Flora Hotel, the PTT Clinic in Calimanesti-Caciulata; Ulcovilvanil--in the treatment of gastric disorders, predominantly ulcers--practiced with special results at the resorts of Felix, Calimanesti, Slanic-Moldova, Singeorz-Bai; Pell-Amar--an original Romanian product from an extraction of mud, used successfully in rheumatism diseases and diseases of the skin (like psoriasis) at the resorts of Neptun, Calimanesti, Felix and at Bucharest's Parc Hotel. Added to these original products are a number of treatments carried out with honey-bearing products, acupuncture treatments and others. A hydromineral cure is being applied with particular success in hypoacid gastritis, gastroduodenal and chronic colitis, with the waters of Slanicul Moldovei and Singeorz-Bai being recommended. The waters from Calimanesti-Caciulata, Olanesti, Tusnad, Slanic-Moldova are recommended for various kidney diseases. The resorts where cardiovascular diseases are treated are enjoying fame, such as Balvanyos, Borsec, Buzias, Covasna, Lipova, Tusnad, Vatra Dornei. At these resorts, people with cardiovascular diseases enjoy an extremely effective treatment provided by a valuable medical corps which is highly qualified and enjoy a good base of modern treatment. Along with this, any of the resorts for treating the cardiovascular diseases have available many types of recreation and enjoyment. The network of resorts treating rheumatism diseases and associated illnesses is also extremely large and varied: Amara, Bazna, Eforie-North, Calimanesti-Caciulata, Felix, Govora, Geoagiu, Herculane, Lacu Sarat, Mangalia, Moneasa, Ocna Sibiului, Puciosa, Vatra Dornei. Also, it should be mentioned that at these resorts, supplied with modern medical apparatuses which have at their disposal highly-qualified medical personnel, the treatments carried out in the locomotor diseases are particularly effective, which should be remembered, particularly today, when the locomotor diseases have become more and more frequent.

Through the measures applied, the tourist supply has improved with a number of new programs, among which are the following:

Itinerary for visiting archeological remains on the seaside, from Dobrogea, Constanta, from Herculane, Roman and Dacian Sarmizegetusa--from the Orastie Mountains and from Alba-Julia, Cluj-Napoca, Piatra Neamt and so forth, as well as the great achievements in the building of socialism: the Iron Gates Hydroelectric Power Central, the Vidraru dam, the industrial constructions in the big centers of Pitesti, Ploiesti, Timisoara, Cluj-Napoca, Targu Mures, Piatra Neamt and so forth, urban building, social-cultural buildings and so forth.

New circuits in Romania for visiting some of the less well-known zones as, for example, in Banat, in Moldavia--the zone of Iasi, in the Apuseni Mountains--and the zone of Stina de Vale and Pestera Ursilor.

Vacations for young people, with the emphasis on study travels by various professions or sojourns in the tourist villages of Leresti, Sibiel, Rucar, Crisan and Murighiol.

Traveler vacations in the mountains of Bucegi, Fagaras, Retezat, Ceahlau and so forth, with this being the form of tourism which makes modern man move in the open air, leads him to the heart of nature and removes him from sedentarism, with the nature of our Carpathians unlocking the joints and revitalizing the entire body.

Weekend travelers, horseback riding programs, fishing programs on the Danube Delta, folklore travels of 1-2 weeks in the zones of great tourist and folkloric interest like Muscel, Suceava, Maramures, Vale Tarnavelor and so forth.

A particularly valued program begun in 1979 and extended to many markets: "Let us learn to sing and dance the popular Romanian dances"--1-2 week programs in the zones of great ethnographic attraction.

Tourism by car continues to remain a big attraction in our offering due to the fact that one can travel freely in Romania on all the country's highways because generally the highways are not crowded, the scenery changes every hundred kilometers, while the system of hotel and camping coupons offers a broad opportunity to choose from the diversity of locations and tourist objectives.

By firmer application of the policy on recreation, its base is to extend with the buildings attached to this activity such as the multi-use halls, which can be adapted to theater and musical performances, films, hall sports, arrangements for doing winter sports, water sports, a varied range of apparatuses and other specific supplies. Being kept in mind is the fact that certain recreational resources should correspond to the personality of each resort in proportion to its profile, structure of tourists.

Just as in other areas of production in the material branches, in tourism, too, the activity carried out on various levels cannot be conceived of outside economic efficiency.

For the Ministry of Tourism as a whole, the volume of profits continually increases, which brings out the more and more pronounced trend for improvement of tourist activity. For example, whereas in the 1971-1983 period the value of fixed capital doubled, profits more than quadrupled.

The opportunities to increase profitability in tourist activity, however, are much greater. Carrying them out, however, means intensification of activity to extend and modernize the capacities for accommodations, using the natural and cultural treasury of the country, development and modernization of service and obtaining maximum efficiency. Precisely for that reason, in order to raise Romanian tourism to the highest levels of economic efficiency, it is necessary to prove not only the competence and responsibility but also a new way of thinking, of taking action, which would bring a radical change in the concept of tourist activity so that the emphasis is placed on qualitative factors and on high efficiency. In any collective leadership organ, the range of reaction can be limited, while the efficiency of activity can be reduced if the people do not possess that dynamism in thinking which gives them the possibility of being receptive to the new, to militate for asserting the new in life and for obtaining high profitability. Only in this way can Romanian tourism gain a new quality, decisively placing itself in the select area of this type of activity at the world level.

Of course, the investment of competence and thought which the workers in tourism are being called on to make with all responsibility will be found in a greater contribution of tourism to an increase in national income and rise in the people's standard of living and the other branches of the national economy will contribute according to the development of tourism. Because, although tourism is an independent activity, it can develop in conditions of high efficiency only in close collaboration and cooperation with other branches and areas of the national economy, such as transportation, chemical industry and petrochemistry, agriculture, small industry trade and cooperatives. One may say that there is not one area of activity in the national economy which, more or less, is not involved in the good development of the activity of Romanian tourism.

A major imperative of tourist activity is the efficient materialization of the new economic mechanism. What must provide a measure and content of all actions is the fact that affirmation of the new mechanism can only take place through the sustained activity of the workers in tourism to promote what is new, to eliminate old practices and mentalities which still continue in the use of the material base and in the area of services and supply. There is a need to improve the system of contracting for the capacities for accommodations, to enlarge and modernize the services, to raise the personnel's professional competence, to diversify the range of recreation offered the tourists. Only in this way can tourist activity develop on the base of a tourist offering characterized by originality and variety.

The way in which such desirables are solved represents the unit of measure for evaluating tourist activity: not according to the number of meetings or actions taken, but according to the degree of efficiency at which tourist activity takes place and according to the size of the profits.

What is decisive for the success of all tourist activity is to raise the quality of the labor force and qualifications of the workers.

During the years a valuable stock of workers has formed for all tourist activities, with this personnel making a decisive contribution to affirmation of Romanian tourism.

The training and advanced training of cadres in tourism are carried out through the modern and specialized central in Bucharest and its branch on the seaside, with the center providing instruction for the approximately 6,000 workers per year. The center trains tourist agents, workers for the activity of accommodations and food service, sales people for those paying in currency and it provides for advanced training for the specialized personnel in the enterprises and county tourist offices. On the other hand, outside the programs carried out by the center for advanced training, there is a system for raising the level of qualifications of working personnel in the units, which benefits 18,000-20,000 workers annually.

The good results obtained by the center for formation and advanced training of cadres in tourism and the hotel industry have been evaluated by the World Organization on Tourism, which proposed that they organize advanced training courses for specialists in the other developing countries, too.

The current and long-range requirements of our tourism by necessity require improvement in the system of the selection and professional formation of the workers, with the emphasis of the training being placed on the aspects of quality, not quantity. This will allow a qualified, demanding personnel to exist in each unit or tourist activity, thus eliminating those cases in which the quality of services leaves something to be desired, the currency plan is not fulfilled, the material-technical base is not utilized to the maximum, while modern elements find it very hard to penetrate the activity of tourism. Under conditions of the development and modernization of tourism, there is special significance in the trades of guide-interpreter, sports instructor and entertainer, specialized personnel and personnel specific to tourism alone.

Proceeding from the idea that a guide carries out a number of important duties, with the impressions which tourists gain depending to a large extent on him and the fact that during the season he works 12-14 hours a day, the plan is to work out a statute for guides. In that same category also are included the recreation director, the person called on to organize games and keep the tourists happy. The existence of one recreation director for each resort and more on those in the seaside resorts would improve the time spent on vacation. The sports instructor for skiing, skating, water skiing, yachting, surfing and diving lessons should keep in mind not only the foreign tourists but also the domestic tourists. It is no less important to extend the multiple qualifications, by which its value provides for increasing the efficiency of work.

By carrying out the goals established by the party, Romanian tourism is recording a dynamic evolution, thus providing the material condition so that in this area, too, the leap in quality becomes the dominant characteristic at the proportions which our entire national economy is seeing.

ROMANIA

STRATEGY FOR MODERNIZATION OF INDUSTRY REVIEWED

Bucharest ERA SOCIALISTA in Romanian No 7, 10 Apr 84 pp 9-11, 46

[Article by Prof Dr Dumitru Fundatura]

[Text] The March 1984 RCP CC Plenum once again fully brought to the center of attention a broad problem on modernization of the entire national economy, primarily industry, on which depends the general progress of any branch of material production. Also, in recent years, following a long period of big quantitative accumulations, the multilateral development of Romania and creation of a balanced economy with a material-technical base at the parameters of modern demands, one capable of solving problems which social-economic needs involve on a high level of science and technology, represent one of the definitive elements of the Romanian model of economic growth.

In accordance with the goals established for this stage, the party has kept and is keeping in mind the decisive role of industry in development of the national economy, at the same time placing a special emphasis on broadening its own base of raw materials and energy base, in carrying out a broad process of modernization of agriculture, promoting a firm policy of saving and superior use of all resources, increasing economic efficiency, consolidating the material, financial and currency balance, thus providing the increase in the national income and, on this basis, continuing to raise the population's standard of living. Special long-range programs which have begun to be applied were adopted for all these areas.

In this context there is special importance in the programs worked out on the initiative and under the direct guidance of Comrade Nicolae Ceausescu and adopted recently by the Grand National Assembly: the Program on more emphatic growth in labor productivity and improvement in the organization and setting of work in the 1983-1985 period and up until 1990 and the Program on improving the technical and quality level of products, reducing consumption of raw materials, fuels and energy and using raw materials and materials in the 1983-1985 period and up to 1990 on a high level.

The basic coordinates upon which is based the concept of Romania's economic growth show the important role in moving from extensive to preponderently intensive development, by which a new quality in the economy is to be achieved, with multiple values socially, spiritually and in the people's standard of

living. In this context the goal has been substantiated to provide an effective structure for our national economy, particularly industry, by differentiating the growth rates of the branches and subbranches of material production, seeking superior utilization of raw material and energy resources, careful management of materials, fuel and energy, modernization of the structure of production and continued growth in the quality of products and their degree of competitiveness. As Comrade Nicolae Ceausescu stressed in his report presented to the 12th party congress, "in the 1981-1985 period we must continue the process of reorganizing industry through the priority growth in the branches of advanced processing and through building of highly technical products and those which are low energy consumers."

The process of reorganizing industry on modern bases is particularly complex and has in mind both a growth in the share of those branches and subbranches which provide for the most sensible possible, complete and efficient utilization of our own base of raw materials as well as faster assimilation of the achievements of modern science and technology, renovation of production, superior utilization of raw materials and materials, more powerful growth in labor productivity and efficiency of all activity. Closely linking these goals is the vein which insures industry's achievement of a high quality and which, in turn, brings qualitative changes, modernizations and significant changes in all sectors and areas of activity.

In the following, we shall refer to some of the principal characteristic elements of the process of reorganizing industry and to the achievements Romania has obtained and the prospects in this area.

#### Priority Growth in the Branches of Advanced Processing

A first direction of action concerns the priority growth of the industrial branches of advanced processing which would use raw materials and native materials on a high level, would include more Romanian intelligence and creativity in the products built, would use the technical, material and human resources which our national economy has available at higher levels. Such an orientation does not mean elimination or stagnation of the growth of certain industrial branches, the development of certain branches and sectors to the detriment of others, but rather a regrouping of forces and current industrial potential and an order for unified development but at varying paces so that high growth rates are insured for certain branches, subbranches or sectors of industrial activity. Of course, in this regard kept in mind are the conditions and requirements of the stage we are going through, the goals we have to fulfill in the coming period and, in the end, the need for raising the people's standard of living, material and spiritual, at a faster rate and at high levels.

Logically, special attention has been given and is being given to the decisive branches for the advancement of the entire national economy, the ones which bring technical progress and which, at the same time, propel the broad promotion of new techniques in the other branches. For example, the share of metallurgy, machine construction and chemistry in the total volume of industry in 1981 was more than 51 percent compared with 39.5 percent in 1965. In 1983, the share of products with a high degree of processing in the machine construction industry, chemical industry and other industrial sectors represented

58 percent of the total volume of export. With regard to the processing industry, it will grow 6.8 percent in 1982, giving priority to the branches and subbranches which utilize raw materials, energy and the labor force at a high level.

A view of the guidelines in the main industrial branches shows the firm course toward manufacturing products of advanced processing. The metallurgical industry will seek more and more to produce in particular the high-quality steels and iron and steel products with a high degree of processing under conditions of maximum savings of the ferroalloys and alloying elements. In machine construction, the tasks are sized so that fulfillment of them would permit covering the internal needs for highly technical products to a greater extent, substantially raising the volume of export and their efficiency. Larger increases are forecast for the electronics industry, fine mechanics industry, for technical installations of high complexity, specialized maritime ships and so forth. In the chemical industry, the emphasis is being placed on superior processing of crude oil, on chemistry of fine synthesis and low tonnage, on production of chemical wires and threads, synthetic rubber, tires, pesticides and products which would contribute to an increase in export and more pronounced reduction in imports.

Measures on the priority development of the industrial branches of advanced processing basically are long-range measures aimed at providing the economy for a longer period of time in this view. For example, according to forecasts, in 1985 the electronics industry will represent around 10 percent of the production of machine construction, while it will reach 16 percent by 1990. Compared with 1980, larger increases will be recorded in 1985 for equipment of industrial electronics (366 percent, with an average annual rate of 29 percent), for electronic components (310 percent, with average annual rate of 25.4 percent); for electrotechnical and electronic automation means (212 percent, with an average annual rate of 16.2 percent), for machine tools (237.2 percent, with an average annual rate of 19.9 percent), as well as for products of the fine mechanics industry (301.3 percent, with an average annual rate of 24.7 percent).

The force of figures proves that the modern reorganization of industry through the priority development of the branches of advanced processing is not a measure of circumstances but rather a healthy, long-lasting orientation intended to insure the forward progress of the Romanian economy, with larger steps, but, in particular, with superior indicators of efficiency in the utilization of social labor.

#### Highly Technical Products Which are Low Energy Consumers

The process of the modern reorganization of industry is thought out in such a way so that it is carried out, among other ways, in the building of highly technical products which are low consumers of energy. The degree reached in the development of industry, the technical supply of the enterprises and industrial units, the workers' ability for technical creation, superior organization of production and work based on modern concepts are factors which provide both the assimilation of new products with high technical-economic and functional parameters as well as the redesign and modernization of existing ones. In this way we can cumulatively provide the lowest possible consumption of materials

and energy along the entire circuit, from raw materials to the finished product. This represents one of the current imperatives of primary importance in evaluating the efficiency of economic activity.

In accordance with the guidelines shown, there has been sustained action taken. For example, in 1983 energy consumption rose at most 2.7-2.8 percent for a 3.4-percent growth in national income compared with 1982 and a 4.8-percent increase in production-industrial good. At the same time, action was and is continuing to be taken, as the 1984 plan also establishes, to gradually reduce the share of some energy-intensive products, those which consume imported materials, such as, for example, cables and conductors, electrotechnical insulators, transformers and high-tension apparatuses, electric lamps, forged parts and so forth, in favor of products for which the cumulative energy consumption is less and which use raw materials and materials from domestic resources and use the technical and human potential which the enterprises have available on a high level.

At the same time, the reorganization of industry means broader openings for carrying out the list of new, superior products, some entering into current manufacture for the first time, products requested for export, with a high degree of competitiveness. Among them are electrically activated drilling installations, drilling bits with bearings of sintered carbides, water-water heat pumps of 31,500-63,000 kcal/hour, self-lubricating compressors for nonaggressive gases, electric diesel locomotives from 1,250-4,000 HP, hydraulic diesel locomotives from 180-2,400 HP, more than 20 types of very heavy train cars, various types of cargo ships of 15,000, 18,000, 55,000 and 65,000 tdw, roll-on/roll-off technical ships of 4,800 tdw and oilers, floating pumping stations and so forth.

As shown in the program on improving the technical and quality level of products, reducing the consumption of raw materials, fuel and energy and using raw materials and materials on a high level in the 1983-1985 period up until 1990 through intensification of projects for redesigning and modernizing products in the current manufacture, improving the concept of those being assimilated and extending the variety of manufacture by assimilating highly technical products, the share of products at the world level will rise to around 69 percent in 1985, to 84.6 percent in 1987 and will near 95 percent by 1990; also, between 2-5 percent of the products should be above the world level.

As a result of the high degree of technicalness of the new products, a reduction in material and energy consumption is being achieved as well as a superior utilization of materials found in the products manufactured. But the problem also should be viewed in another regard, that is, that of the energy consumption needed for the operation of this equipment and these products. We also see another direction of the reorganization--building highly technical products with lower energy consumption, products which transmit favorable chain reactions throughout the economic circuit, from production to consumption. There are two significant examples: the new electric transformers and the new electric motors, which have losses of electric energy which are 15 percent less than the old types, and the electronic telephone centrals, which have 20-percent lower energy consumption than previous types.

So, the direct and indirect energy consumptions as well as immediate and cumulative consumptions represent basic criteria in evaluating the technical degree of the efficiency of products and account absolutely must be taken of them in drawing up the industrial manufacturing lists for all the enterprises and units in the economy.

What is being sought through the priority development of industrial branches of advanced processing is achievement of yet another desirable which, in the current stage and under international economic circumstances, takes on major importance. It is a matter of sensible utilization of material and energy resources with a spirit of savings, of obtaining as high a volume as possible of goods from the same quantity of materials entered into production consumption. In this context, there is special importance in continued reduction in consumption standards, in eliminating waste and disorder and in responsible management of the material resources entrusted to them.

Some results recorded in this field are as eloquent as they are promising. For example, 60 percent of the growth in industrial production this year must be achieved by superior utilization of basic raw materials, fuels and energy. Each percentage point of additional reduction in material production expenses in industry provides savings of more than 11 billion lei. Or another example. The degree of utilization of metal for the entire machine construction industry in 1982 was around 14 percent higher than in 1981. In 1984, each million lei of production-good in the machine construction industry, according to forecasts, is to be achieved with a lower metal consumption than in 1983; together with rolling at negative tolerances, this will provide savings of more than 600,000 tons of metal.

#### Superior Utilization of All Material Resources

In accordance with the tasks drawn by the 12th party congress and the national party conference, special programs were worked out which direct the activity of certain industrial branches, subbranches and sectors toward continuing to reduce specific consumption, toward superior utilization of material and energy resources. At the same time greater attention is being given to increasing the percentage of products which utilize material and labor resources on a high level. In 1983 alone in the machine-tool, electronics and electrotechnics industry, for example, a 13.8-percent more substantial increase in electronic components of fine mechanics and optical products was provided over 1982 and 7.2 percent more hydraulic and pneumatic elements. On this basis, in that particular branch the degree of utilization of the main raw materials and materials rises by more than 10 percent, reaching 4.9 lei production-good for 1 leu of raw materials. The emphasis also must continue to be placed on substantially reducing consumption standards, the main factor in reducing material expenses, but also on utilizing the materials which replace the scarce and imported ones and on using materials from local resources.

Throughout the country, the action to improve the organization of production and of labor, to continue improving the structure of consumption, to reduce and eliminate technological and nontechnological losses and to reduce specific consumption is being emulated considerably, specifically in savings of material resources and, on this basis, in reduction of material expenses. In the

chemical industry, for example, by reducing technological consumption as well as by reducing losses in the processing of crude oil, important savings of crude oil also are being obtained in petrochemistry; at the same time, by reducing the thickness of the leaf intended for industry and agriculture, an increase in production is being obtained over the plan forecasts, by using the same quantity of raw material.

Superior utilization of the resources of raw materials and materials by reducing the consumption standards and by saving on resources has double importance: on one hand, the quantity of raw material included in the product is reduced and, by this, the total production costs are reduced while, on the other hand, reserves are created for certain materials, which permit reduction in imports or increase in production. Around 60,000 tons of metal were saved in metallurgy in 1982 compared with 1980 by improving the index of removing in the mills and around 100,000 tons of liquid cast iron in the steel mills, which in turn reduced the imports of ore and metallurgical coke. Similar examples can be met in all branches and subbranches of our socialist industry just as the reserves for reducing consumption continue to be rather large.

The problem of superior utilization of material resources, however, also has another aspect--that is, complete utilization of raw materials and materials entering into consumption. In accordance with the indications of the party's secretary general, Comrade Nicolae Ceausescu, and in full agreement with the measures taken for more and more emphatic increase in economic efficiency, a true recycling industry has developed in Romania, one which provides for returning recoverable and reusable materials back into industrial consumption. In this way, the degree of participation of reusable materials in providing resources of raw materials and materials needed in 1984 will be 52 percent for steel production, 48.3 percent for pig iron, 54.5 percent for copper, 56.6 percent for lead, 25.7 percent for repulped stock.

The recovery and reutilization of materials also has taken on unprecedented scope at the world level. The explanation must be sought in the fact that by this action we insure the condition for the entire volume of raw materials and materials to be found again in values of usage, in products which are useful to society, taking into account that which we improperly call technological and nontechnological losses (ends, lamella, shavings, edges and so forth) represent social work carried out, which can and must be used and not simply thrown out.

Clearly, carrying out a widespread action for the recovery and reuse of all material and energy resources involves not only appropriate organization but also technical preparation, working out adequate technologies for processing, a material base needed for collecting and processing a large and diversified volume of reusable materials. All these occupy an important and vital place within the modern reorganization of industry, fully aiding the continued growth of economic efficiency of all activity.

#### Promotion of Technical Progress, a Basic Condition for Increase in Efficiency and Competitiveness

The priority growth of the branches of advanced processing, producing products of high technical nature which are low energy consumers, involves an increase

in the share of the industrial branches, subbranches and sectors which provide assimilation of technical progress in the shortest possible time, faster introduction of the newest achievements of science and technology into the manufacturing processes. The results of such activity are measured by many factors, among which are the degree of renovation of production, length of time for assimilating new or modernized products, the degree of competitiveness of Romanian products on the foreign markets. In this regard, the emphasis also is being placed on the branches bringing technical progress--metallurgy, machine construction and chemistry, which provide for rapid assimilation of products, materials, technologies, including nuclear technology, and those which prepare technical-material conditions for the other industrial branches, conditions for having them assimilate technical progress.

Characteristic of the process of reorganizing Romania's industry are the continually higher degree and rate of renovation of production. Here is how matters stand: In 1984 more than 35 percent of the total volume of production-good in the processing branches of Romania's industry will be represented by new and modernized products introduced into manufacture in the current five-year plan.

What we should note is that the volume of assimilation of new products represents more than a tripling of the efforts of the design and technological preparation of manufacture, compared with the average of achievements in the last two years. Elements of technical progress are estimated to provide more than 52 percent of the increase in labor productivity and reducing the time for assimilating complex equipment in half. Actually, in the last 10 years more than 7,700 new and improved technologies have been applied in production, with technical and economic parameters similar to those from the advanced countries; more than 2,200 new and modernized technologies are to be applied in production by 1985, of which nearly 60 percent are in machine construction, metallurgy and chemistry.

In regard to the increase in degree of competitiveness, the top industrial branches have provided for the increase in traditional export and Romania's penetration into new markets, where there also are world-famous suppliers: motors and electric cables in the United States and Canada; telephone centrals and electric diesel locomotives in Greece; power transformers in Canada and Brazil; machine tools in the FRG, Italy, England, France and the United States. These facts show the force of Romanian industry, particularly the value of the quality which the particular products show in competition with similar products from other countries.

The technical-quality level and competitiveness of products are indissolubly linked with the degree of mobility of production in the industrial enterprises. In this regard, in many enterprises, particularly those which have supplementary production capacities, the move has been to a reprofiling and creation of a second profile. This aims at more extensive orientation of production toward real needs, toward more fuller satisfying of social demand, moving production to new profiles of manufacture "on the fly," depending on the market and demands of the foreign beneficiaries, rapidly adapting technology to a new manufacturing list, to new varieties or qualities and to new conditions of production and sales. The degree of adaptability of production thus is affirmed as

one of the indicators measuring the technical level and modernness of the enterprise, its ability to accept what is new , level of currentness, of the modernity available faced with the internal and international economic context in which it is and in which it carries out its production and sales relations. The Romanian industrial enterprises permanently must respond precisely to such a demand.

In the area of the modern reorganization of Romanian industry, incontestable achievements have been obtained, but there still is a lot, quite a lot, to do in order to reach the level of modernness which is possible and necessary. Party documents clearly orient this process and set the tasks and goals to be sought with precision. What are needed are perseverance, tenacity, a spirit of responsibility and initiative from all the collectives of working people and all the central and local economic organs.

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YUGOSLAVIA

PRODUCTION, LABOR PRODUCTIVITY, SALARIES IN COAL, ORE MINING

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 10 Apr 84 p 5

[Article by Branko Inic: "Evident Growth of Output Last Year"]

[Text] According to the final statistical data, the Yugoslav output of conventional fuel (coal) and metallic minerals--iron ore and ores of nonferrous metals (bauxite, copper ore, lead-zinc ore and antimony ore), reached a level that deserves attention in 1983. During the 1983 business year 170,000 miners, geologists, smelters, chemical workers and other workers and specialists employed in the mining and smelting industry produced 94.66 million tons of coal, iron ore and ores of nonferrous metals. That is more than 24.22 million tons, or 34 percent, greater than in 1979. In the previous year, 1982, production of coal and metallic ores was 7.25 million tons less, so that the growth rate between 1982 and 1983 was 9.92 percent. Metallurgical capacities produced 4.729 million tons of steel, electrolytic copper, gold and antimony, which represent an increase of 10.63 percent over 1982.

First Hints of an Intensification of Production

The actual physical volume of output of coal, ore and metal in 1983 in the first months of this year is encouraging and suggests an evident change of direction toward a more appreciable growth of fuel and metallic minerals. These are the first impressions and optimistic forecasts concerning an overall assessment of the future course and direction of exploitation of the natural resources which Yugoslavia possesses. After all, according to what we now know about the mineralogical base, it can be stated with a great deal of optimism that Yugoslavia is close to the group of countries which have adequate fuels, metallic and nonmetallic minerals of their own as a reliable basis for the future development and modernization of the manufacturing industry.

Other important figures which in a certain way magnify the production results achieved in the most important part of the extractive industry in our country have to do with the size of the labor force and labor productivity. Though scanty, these figures are all the more interesting when we realize that the size of the labor force in the mining and metallurgical combines, fuel mining combines and chemical combines had been stagnant in recent years (this had also been characteristic of the volume and mix of mining and metallurgical

output). In 1983 the size of the labor force increased by 4,600, or 3.3 percent over 1982 and 14,900 and 14.8 percent over 1979.

#### A More Favorable Trend of Personal Incomes

As for labor productivity, the results look like this. By comparison with 1979 productivity in 1983 was up 18.4 percent, and an 8.6-percent rise of productivity was recorded over the period 1979-1982. Thus annual output per employee in 1979 was 822 tons; over the period 1979-1982 it was 896 tons, and in 1983 it was 973 tons. The best results in achievement of this well-known economic indicator were achieved by the coal mines--a 23.24-percent increase over 1979 and a 10.16-percent increase over average productivity in the period 1979-1982. Mines producing nonferrous metals, with respective increases of 12.55 percent and 7.00 percent, take second place, and third place is occupied by iron mines--an improvement of only 2.65 percent.

We will also present with particular interest a datum on the trend of personal incomes in the mining and metallurgical industries, which, combined with the data already given, would complete our examination, estimates and forecasts concerning fuel and metallic minerals. For the simple reason that personal incomes in mining and smelting have for a number of years been among the lowest in Yugoslavia's sector of industry and mining. For all practical purposes they have begun since the period marked by the great energy crisis in the world and therefore in our country as well toward taking up that place which they deserve in view of the difficult working conditions underground and alongside the smeltery furnaces and the great dangers to the lives and work of the miners and smelters. There was no choice--better incentives as a precondition for higher productivity and larger output. The figures below allow one to see what has been done in this area and whether the personal incomes of miners and smelters are ultimately such as to attract more and more young manpower to the mines and smelters.

#### Average Personal Incomes Received

<u>Indicator</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Yugoslavia	7,368	9,846	12,542	15,858
Economy	7,167	9,675	12,329	15,638
Industry and mining	6,975	9,557	12,153	15,440
Coal	8,998	12,721	16,747	21,052
Ore production	7,869	10,492	13,548	17,819
Metal production	7,877	10,497	13,534	18,155

It is worth saying at the end that on the basis of a critical assessment of the basic potential in terms of the organization of production, economic potential, technical and technological potential, personnel and other available resources, it is now possible to sketch out the main plans and programs for development in this economic sector up to the year 2000. What we have said represents only a small part of what needs to be done in the first stage of examining the line of development of our natural resources up to the year 2000. Let us only add that the Yugoslav coal mines produced 1.027 billion

tons of coal between 1945 and 1983, that by the end of this century (beginning in 1984) they will produce another 1.1 billion, and that the official reserves of this "black gold" in Yugoslavia are 22.3 billion tons.

[Insert from adjacent article]

With its population of 21.5 million, Yugoslavia has a 0.55-percent share of the world population, while its share in world output is as follows, in percentage:

Coal	1.1	Bauxite	3.2	Mercury	6.8
Petroleum	2.3	Copper ore	1.6	Gold	0.4
Iron ore	0.4	Lead ore	3.5	Silver	1.5
Antimony	3.0	Magnetite	4.2		

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GOLD, SILVER PRODUCTION, FOR 1982, 1983

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 10 Apr 84 p 5

[Article by B. I.: "Prices Have Had Decisive Importance"]

[Text] Yugoslav production of nonferrous metals: refined lead, electrolytic zinc, electrolytic copper, aluminum, refined silver, refined bismuth, antimony and gold, reached 593,515.25 tons in 1983. It must immediately be said that this is the highest level of output of these metals since 1979. The year 1979 was taken as the base year because it is since that year, up through 1982, that the production of nonferrous metals had held at the same level (annual average 525,565 tons), that is, with a symbolic average growth rate of 0.23 percent. The growth over the 4 years was also symbolic--only 3,655.6 tons. This was a period of time marked by a loss of the glitter and color of these metals, which are always scarce on the domestic and world markets.

The production results achieved in this important economic activity last year and in the first months of this year lead us to conclude that a certain change of direction has been taken toward a more appreciable growth of production of nonferrous metals in our country. The datum that in 1983 metal output increased 50,238 tons, or 9.25 percent, over 1982 and 12.93 percent over the average annual production in the period 1979-1982 is encouraging and indicates the great effort being made by miners and metallurgical workers to perform the principal tasks in the domain of economic stabilization.

This appreciable growth of production of nonferrous metals has been achieved thanks to the larger output of the so-called polymetallic ores from which these metals are obtained. Thus in 1983 the physical volume of output of ore was 31.06 million tons, which is 7.36 million tons greater than production in 1979, for an increase of about 19 percent (18.89). The noticeable difference between the growth rate of the production of ore and the production of metal from the ore is occurring mainly because of the drop in the content of metal in the polymetallic ores (metal was also processed from so-called secondary raw materials), which is a general characteristic of the exploitation of ores of nonferrous metals in our country and in the world in general.

In order to offer a broader view and clearer idea of the success of a part of the extractive industry (mining and metallurgical production), we need to

present not only figures on the physical volume of ore and metal, but also value indicators in broad outlines. Value indicators will make it possible for us to learn some interesting things about economic developments and changes on world nonferrous metals markets which have been brought about and are conditioned by the rapid development of technology, political and economic developments, the rise of the social and personal standard of living, the application of technical and technological discoveries in the electrical equipment, electronics and chemical industries, and the progress of science in general. On this occasion we will restrict ourselves only to refined silver and gold.

Yugoslav production of these two metals, viewed from the standpoint of world production, is relatively large in terms of quantity. Silver has a share of 1.56 percent. The share of gold production is less, only 0.04 percent. But the value of these metals has had great importance to the Yugoslav mining and metallurgical production of nonferrous metals in recent years, as can be seen from the comparisons given in the table.

The share of the physical volume of production of silver and gold in total production of nonferrous metals was 0.022 percent in 1983 and 0.020 percent in 1982, which is almost negligible. By contrast, the share indicated in terms of value offers a quite different picture. This can be seen from the table:

<u>Indicator</u>	1982		1983	
	<u>Amount</u>	<u>Share</u>	<u>Amount</u>	<u>Share</u>
Total value	50,219,673,080	100.00	92,914,420,000	100.00
Silver and gold alone	9,394,266,400	18.71	12,482,290,000	13.52

Last year the value of silver and gold obtained from lead-zinc and copper ores, representing about 12.5 billion (new) dinars, was 18.57 percent of the total value of nonferrous metals in 1983. The markedly high rise of the prices of noble metals--gold and silver, has tended to change the proportional relations in the value of these ores, so that last year the value of these metals (excluding aluminum), with a share of 29.22 percent, were in second place (immediately after electrolytic copper). It turns out that on the basis of the income brought in by silver and gold, the lead and zinc mines and copper mines ought to be referred to by different names.

The first hints of a noticeable rise in the prices of silver and gold were detected in 1978. The very next year the prices of those metals rose 114.3 percent and then last year reached 901.4 percent over the first year when a change in the prices of these scarce metals was announced on the world noble metal exchanges. Judging by the current trends and also expectations in coming years, silver and gold prices will continue to move upward. The reasons for this situation result from a wide range of social, natural, technical and technological, and international factors (the market, the countries which are traditional consumers of silver and gold). Those reasons are more or less well known. In any case, it will be interesting to examine which of them will be influencing silver prices.

The accelerated, dynamic and continuous development of the film, chemical, electrical equipment and electronics industries, with constant demands for increased silver production, should certainly be put in first place. There is a very high demand for silver in photographic and cinematographic equipmentmaking--professional filmmaking and television. The development of the electrical equipment and electronics industries, with their marked expansion of the assortment and purposes of electrical equipment and apparatus, instruments and other devices, is having a direct impact on the price of silver; since demand is increasing all the time, while silver production is showing relatively little growth.

Within these industries let us mention only materials for making electrical contacts, a field in which silver has exceptionally good properties for hard soldering (hard soldered joints for joining different metals). In the chemical industry the use of silver in combination with vanadium has an exceptional property as a catalyst, and they are referred to as vanadium-silver catalysts. In recent years the production of silver-zinc storage batteries has had a significant place in the production of chemical sources of electricity, and other products are also being produced as chemical sources of electricity in which silver, as one of the important substances, is more and more becoming a basic raw material in the conventional sense of the word. In medicine silver was put to use relatively early, and its use is continuing to increase.

Silver jewelry, silver hollowware, silver buttons, silver ornaments and similar products have shown a high demand in recent years. Traditional consumers of silver products are the Near East and India. For example, in recent years this region has consumed about 60 tons of silver a year, which is 8.8 percent of world production.

These would be the principal factors which have had a direct or indirect influence on the course and direction of the movement of silver prices.

Let us also add that the consumption of silver is twice as great as primary production. Secondary raw materials are not always to be counted on. Accordingly, it is not difficult to conclude what preceded the high rise of silver prices in recent years. However, in order to round out this topic of silver, we should be aware that silver is also produced as an accompanying metal from polymetallic ores of lead and zinc and copper. That is, these ores are produced for the sake of the lead and zinc and copper, which means that their volume cannot be increased.

It is a fact that in recent years the price, i.e., the value, of the silver has had decisive importance to overall financial and business results in a major segment of lead and zinc mines. The silver price has also eased the relatively difficult economic position of copper mines, smelters and refineries.

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